Supreme Court, U.S.
FILED
MAR 2 - 2006
OFFICE OF THE CLERK

NO. 05-1120

IN THE

Supreme Court of the United States

COMMONWEALTH OF MASSACHUSETTS, *et al.*
Petitioners,
v.
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY,
Respondent.

ON PETITION FOR A WRIT OF CERTIORARI TO THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

PETITION FOR WRIT OF CERTIORARI

THOMAS F. REILLY
Attorney General
of Massachusetts

LISA HEINZERLING
Georgetown Univ. Law Center
600 New Jersey Ave., N.W.
Washington, DC 20001

JAMES R. MILKEY*
WILLIAM L. PARDEE
CAROL IANCU
Assistant Attorneys General
1 Ashburton Place, 18th Floor
Boston, MA 02108
(617) 727-2200
**Counsel of Record*

Attorneys for Petitioners
(Additional Counsel Listed on Signature Pages)

Table of Contents.

Table of Authorities ii

Opinions Below 1

Jurisdiction 1

Statutory and Regulatory Provisions 1

Statement 2

Reasons for Granting the Petition 12

I. In Upholding EPA's Decision Based on Factors Not Mentioned in the Relevant Statutory Provision, the Lead Opinion Below Dramatically Departed from this Court's Precedents. 13

II. EPA Misread FDA v. Brown & Williamson Tobacco Corp. in Concluding that It Lacks Authority to Regulate Air Pollutants Associated With Climate Change. 16

III. The Issues Raised By this Case Merit this Court's Review Because They Go to the Heart of EPA's Statutory Responsibilities to Address the Most Pressing Environmental Challenge of Our Time. 22

Conclusion 26

Table of Authorities.

Cases.

Barnhardt v. Sigmund Coal, 534 U.S. 438 (2002) 14

Consumer Product Safety Comm'n v. GTE Sylvania, 447 U.S. 102 (1980) 13

Dept. of HUD v. Rucker, 535 U.S. 125 (2002) 17

Diamond v. Chakrabarty, 447 U.S. 303 (1980) 22

Ethyl Corp. v. EPA, 541 F.2d 1 (D.C. Cir. 1976) 5, 15

FDA v. Brown & Williamson Tobacco, Corp., 529 U.S. 120 (2000) 3, 4, 13, 17, 19-22

General Motors Corp. v. United States, 496 U.S. 530 (1990) 14

Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto Ins. Co., 463 U.S. 29 (1983) 15

PGA Tour, Inc. v. Martin, 532 U.S. 661 (2001) 22

Pollard v. United States, 352 U.S. 354 (1957) 16

Russello v. United States, 464 U.S. 16 (1983) 14

SEC v. Chenery, Corp., 318 U.S. 80 (1943) 15

Union Elec. Co. v. EPA, 427 U.S. 246 (1976) 14

Whitman v. American Trucking Ass'ns,
531 U.S. 457 (2001) 8, 14

Statutes, Regulations & Court Rules.

28 U.S.C. § 1254(1) 1

Clean Air Act

§ 111(b)(1), 42 U.S.C. § 7411(b)(1) 8

§ 202, 42 U.S.C. § 7521 5-7, 16

§ 202(a), 42 U.S.C. § 7521(a) 5, 7

§ 202(a)(1), 42 U.S.C. § 7521(a)(1) 1-
15, 17, 18, 20

§ 202(a)(2), 42 U.S.C. § 7521(a)(2) 7, 20

§ 202(a)(4)(A), 42 U.S.C. § 7521(a)(4)(A) 7

§ 302(g), 42 U.S.C. § 7602(g) 1, 6, 17

§ 302(h), 42 U.S.C. § 7602(h) 1, 6, 18

§ 307(b), 42 U.S.C. § 7607(b) 3, 4

Energy Policy and Conservation Act
49 U.S.C. §§ 32901-32919 (2003) 21

Global Climate Change Research Act of 1990,
15 U.S.C. § 2938(c) 21

Clean Air Act Amendments of 1977, Pub. L. No. 95-95,
§ 401, 91 Stat. 791 (1977) 5

Clean Air Act Amendments of 1970,
Pub. L. No. 91-604, § 6, 84 Stat. 1690 (1970) 5

68 Fed.Reg. 52922 (September 8, 2003) 2

71 Fed. Reg. 9869/3 (February 27, 2006) 24

Miscellaneous.

H.R. Rep. No. 95-294 6, 15

Intergovernmental Panel on Climate Change, *Third Assessment Report* (2001) 18, 25

Joint Science Academies' Statement: Global Response to Climate Change (July 2005), http://nationalacademies.org/onpi/06072005.pdf. 25

Letter from Gary S. Guzy, EPA General Counsel, to Rep. David M. McIntosh, Chairman, Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs, House Committee on Government Reform (July 12, 2000) 10

March 3, 2001 Statement of EPA Administrator Christine Todd Whitman, Remarks delivered at the G8 Environmental Ministerial Meeting Working Session on Climate Change, Trieste, Italy (March 3, 2001), available at: http://yosemite1.epa.gov/administrator/speeches.nsf/b1ab9f485b098972852562e7004dc686/36bca0e3a69a0d8b85256a41005d2e63?OpenDocument. 23

Memorandum of Jonathan Z. Cannon, General Counsel, to Carol M. Browner, Administrator, *EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources* (April 10, 1998) 17

National Research Council, *Climate Change Science: An Analysis of Some Key Questions* (2001) 23

Statement of Russell E. Train. *The New York Times*, "6 Ex-Chiefs of EPA Urge Action on Greenhouse Gases" (January 19, 2006) 25

Testimony of Gary S. Guzy, EPA, General Counsel, Joint Hearing of the House Subcomm. on Nat'l. Econ. Growth, Natural Res. and Regulatory Affairs of the Comm. on Gov't Reform and the House Subcomm. on Energy and Env't of the Comm. on Sci. (Oct. 6, 1999) 10

U.S. Climate Action Report 2002 23

Parties to the Proceeding

Petitioners, who were petitioners in the appeals court, are the Commonwealth of Massachusetts, the states of California (acting by and through Governor Arnold Schwarzenegger, California Air Resources Board, and Attorney General Bill Lockyer), Connecticut, Illinois, Maine, New Jersey, New Mexico, New York, Oregon, Rhode Island, Vermont, and Washington, the District of Columbia, American Samoa Government, New York City, Mayor and City Council of Baltimore, Center for Biological Diversity, Center for Food Safety, Conservation Law Foundation, Environmental Advocates, Environmental Defense, Friends of the Earth, Greenpeace, International Center for Technology Assessment, National Environmental Trust, Natural Resources Defense Council, Sierra Club, Union of Concerned Scientists, and U.S. Public Interest Research Group.

Respondents are the Environmental Protection Agency (a respondent below); the Alliance of Automobile Manufacturers; National Automobile Dealers Association; Engine Manufacturers Association; Truck Manufacturers Association; CO_2 Litigation Group; Utility Air Regulatory Group, and the States of Michigan, Texas, Idaho, North Dakota, Utah, South Dakota, Alaska, Kansas, Nebraska, and Ohio (all intervenors below).

Corporate Disclosure Statement

The non-governmental petitioners are all nonprofit corporations or organizations. None of them has a parent corporation, and no publicly-held company has a 10% or greater ownership interest in any of these entities.

Questions Presented

Section 202(a)(1) of the Clean Air Act, 42 U.S.C. § 7521(a)(1), requires the Administrator of the Environmental Protection Agency ("EPA") to set emission standards for "any air pollutant" from motor vehicles or motor vehicle engines "which in his judgment cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare." The questions presented are:

1. Whether the EPA Administrator may decline to issue emission standards for motor vehicles based on policy considerations not enumerated in section 202(a)(1).

2. Whether the EPA Administrator has authority to regulate carbon dioxide and other air pollutants associated with climate change under section 202(a)(1).

PETITION FOR A WRIT OF CERTIORARI

Petitioners respectfully petition for a writ of certiorari to review the judgment of the United States Court of Appeals for the District of Columbia Circuit.

Opinions Below

The opinions of the court of appeals (App. 1-58) are reported at 415 F.3d 50 (D.C. Cir. 2005). The following additional orders or statements of the court of appeals are reproduced in the appendix: the order denying petitioners' petition for rehearing (App. 98), the order denying petitioners' petition for rehearing *en banc* (App. 94-95), and the statement by Judge Tatel, joined by Judge Rogers, dissenting from the denial of rehearing *en banc* (App. 96-97)(the last two documents are reported at 433 F.3d 66 (D.C. Cir. 2005)).

Jurisdiction

The judgment of the court of appeals was entered on August 15, 2005 (App. 99-100). On December 2, 2005, the court denied petitioners' timely petition for rehearing, and the court denied, by a 4-3 vote, petitioners' timely petition for rehearing *en banc*. This Court's jurisdiction is invoked under 28 U.S.C. § 1254(1).

Statutory and Regulatory Provisions

The relevant statutory provisions are sections 202(a)(1)-(a)(2), 302(g) and 302(h) of the Clean Air Act. 42 U.S.C.

§§ 7521(a)(1)-(a)(2), 7602(g), 7602(h). They are set forth *infra*, App. 101-02.

Statement

In 1999, several parties petitioned EPA to set regulatory standards for four air pollutants emitted by motor vehicles.[1] The petition asserted that, due to the effects on climate, the emission of these pollutants by motor vehicles "may reasonably be anticipated to endanger public health or welfare" within the meaning of section 202(a)(1) of the Clean Air Act. (App. 60-63.)

After public notice and comment, EPA decided not to set standards for the four air pollutants. 68 Fed.Reg. 52922 (September 8, 2003)(App. 59-93.) In explaining its decision, EPA never applied the statutory standard in section 202(a)(1); that is, the agency did *not* find that the scientific evidence regarding the pollutants' effects fell short of the "may reasonably be anticipated to endanger public health or welfare" standard. Rather, the agency simply ignored that standard and instead relied on various "policy" considerations not mentioned in section 202(a)(1). (App. 82-88.)

EPA also concluded that it had no authority to regulate air pollutants associated with climate change, regardless of the state of the scientific evidence. The agency concluded that the four substances covered by the petition are not "air pollutants" within the meaning of the Clean Air Act, even though it did not

---

[1] The four air pollutants are carbon dioxide, methane, nitrous oxide, and hydrofluorocarbons. (App. 60.)

dispute that the plain language of the Act supported regulation. According to EPA, this "facially broad grant of authority" was not enough to justify regulation after this Court's decision in *FDA v. Brown & Williamson Tobacco, Corp.*, 529 U.S. 120 (2000). (App. 68-79.)

Thirty parties, including sixteen states and other governmental bodies, filed petitions for review pursuant to 42 U.S.C. § 7607(b), challenging EPA's denial of the rulemaking petition. The D.C. Circuit denied these petitions on the merits. (App. 99-100.)

Judge Randolph wrote the lead opinion for the panel, with Judge Sentelle joining in his judgment. Judge Randolph concluded that EPA acted lawfully in declining to regulate air pollutants under section 202(a)(1) of the Clean Air Act based on "'policy' considerations" nowhere mentioned there. (App. 14.) EPA was not, he thought, required to base its decision on the factors actually enumerated in section 202(a)(1), but was instead justified in giving expression to "the sort of policy judgments Congress makes when it decides whether to enact legislation regulating a particular area." (App. 13.)

Judge Tatel dissented. He explained that "the Clean Air Act gives the Administrator no discretion to withhold regulation" under section 202(a)(1) for reasons unrelated to danger to public health or welfare. (App. 42-58.) He also concluded that EPA has authority to regulate air pollutants associated with climate change. (App. 31-42.)

By a vote of 4-3, the court denied *en banc* review. (App. 94-95.)

The ruling in this case is an extreme departure from this Court's precedents on statutory interpretation. EPA rewrote the Clean Air Act to justify its decision, and the lead opinion below approved the rewriting. To allow this decision to stand would be to sanction an enormous shift of power to administrative agencies, effectively letting them dismantle statutory regimes they simply do not like. The seriousness of the legal error here is compounded by the fact that it came out of the D.C. Circuit, the premier intermediate court for adjudicating issues of agency power and statutory interpretation, and the only court in the country – other than this Court – with the authority to review the EPA actions presented here. 42 U.S.C. § 7607(b).

Equally imperative is this Court's review of EPA's conclusion that it has no authority to regulate air pollutants associated with climate change. EPA's legal judgment rested on an obvious over-reading of this Court's decision in *FDA v. Brown & Williamson, supra*. *Brown & Williamson* is not a blank check to avoid regulating in politically controversial settings. The Court should grant certiorari to correct this misunderstanding of its decision.

Petitioners seek this Court's review in order to slip the case back into its proper legal joint, where an assessment of the scientific evidence of danger to public health and welfare – and not "'policy' considerations" nowhere mentioned in section 202(a)(1) – are the determining factor in deciding whether to regulate air pollutants associated with climate change.

A. Statutory Background

Section 202 of the Clean Air Act, 42 U.S.C. § 7521, creates, in broad terms, a two-step process for regulating air pollution from motor vehicles. Section 202(a)(1) creates the "trigger" for regulatory action, and the remainder of section 202(a) describes how EPA should set and implement the standards that have been triggered.

At the first step in the process, section 202(a)(1) directs the EPA Administrator's attention to the question whether "any air pollutant" from new motor vehicles or new motor vehicle engines "cause[s], or contribute[s] to, air pollution which may reasonably be anticipated to endanger public health or welfare." If "in his judgment" (42 U.S.C. § 7521(a)(1)), this so-called "endangerment standard" is met, then the obligation to regulate is triggered.

Before the 1977 Amendments to the Clean Air Act, section 202(a)(1) required the Administrator to regulate air pollution from motor vehicles that "endangers the public health or welfare." Pub. L. No. 91-604, § 6, 84 Stat. 1690 (1970). In 1976, the D.C. Circuit interpreted the "endangers" language as permitting "regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable." *Ethyl Corp. v. EPA*, 541 F.2d 1, 15 (D.C. Cir. 1976)(*en banc*). In 1977, Congress amended section 202(a)(1) and the other standard-setting provisions in the Clean Air Act to require regulation where endangerment "may reasonably be anticipated." Pub. L. No. 95-95, § 401, 91 Stat. 791 (1977).

Congress expressly intended these additional words to underscore the obligation to assess risks and to take action even under conditions of uncertainty. H.R. Rep. No. 95-294, at 49-51.

The "air pollutant[s]" subject to regulation under section 202 are defined thus:

> any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air. . ..

Clean Air Act § 302(g), 42 U.S.C. § 7602(g). "Welfare," endangerment of which triggers the regulatory obligation under section 202(a)(1), is defined in this way:

> All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and **climate**, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.

Clean Air Act § 302(h), 42 U.S.C. § 7602(h)(emphasis added). Thus, a substance emitted into the air which endangers climate is, under the express terms of the relevant statutory provisions, subject to regulation under section 202.

The second step in regulating air pollution from motor

vehicles involves deciding exactly what the regulatory standard for the pollutant(s) in question should be, and when the standard should be effective and for how long. The pertinent remainder of section 202(a) is concerned with these kinds of questions. At this stage of regulatory decisionmaking, factors beyond "endangerment" come into play. Section 202(a)(2) provides that standards set under section 202(a)(1) "shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period." Section 202(a)(4)(A) further requires the Administrator to assure that there will not be "an unreasonable risk to public health, welfare, or safety" due to the "operation or function" of an emission control "device, system, or element of design." 42 U.S.C. § 7521(a)(4)(A).

Thus section 202 creates two very different steps in the process of setting standards for air pollution from motor vehicles. The first step is almost pristine in its simplicity: the Administrator is required to regulate when, "in his judgment," motor vehicles cause or contribute to air pollution which "may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1). The second step – setting technologically and economically feasible standards once endangerment is found – involves an assessment and balancing of an assortment of other factors.

This kind of two-step process is typical of regulation under the Clean Air Act. In setting the national ambient air quality standards ("NAAQS"), for example, EPA first assesses the harmfulness of an air pollutant to human health and welfare,

without regard to economic costs or technological feasibility, and then implements the harm-based NAAQS while taking into account costs, feasibility, and other factors. *See Whitman v. American Trucking Ass'ns*, 531 U.S. 457 (2001). Likewise, section 111 of the Act requires EPA to regulate emissions from various kinds of stationary sources by first listing a "category" of sources when "in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare," and then establishing performance standards for that category after the agency has considered a variety of other relevant factors. 42 U.S.C. § 7411(b)(1).

B. EPA's Decision

In September 2003, EPA, after notice and comment, issued its decision refusing to set motor vehicle standards for substances associated with climate change. (App. 59-93.) EPA's decision rested on the two legal conclusions at issue here.

As one ground for its decision, EPA stated that it "disagree[d] with the regulatory approach urged by petitioners" (App. 82) and thus, in light of various "considerations" discussed by the agency, it would decline to use any authority it had under the statute to regulate the four substances. (App. 82-88.) In simple terms, EPA's legal position was that it could reject the regulatory approach embodied in section 202(a)(1) of the Clean Air Act – in light of "considerations" not found in that provision.

The "considerations" EPA thought sufficient to justify

rejecting the regulatory approach of section 202(a)(1) of the Clean Air Act included a variety of factors. First, EPA cited the presence of various scientific uncertainties. (App. 83-85.) At no point, however, did EPA apply the statutory endangerment standard to determine whether the scientific evidence was strong enough to support regulation despite the presence of these uncertainties.

Second, EPA concluded that regulation under section 202(a)(1) was not warranted because it would "result in an inefficient, piecemeal approach to addressing the climate change issue," since motor vehicles are only one of many sources of air pollutants associated with climate change. (App. 85-86.)

Third, EPA asserted that "[u]nilateral EPA regulation" in this area could "weaken U.S. efforts to persuade key developing countries to reduce the [greenhouse gas] intensity of their economies." (App. 86.) EPA concluded therefore that regulation of air pollutants associated with climate change "raises important foreign policy issues," which it was "the President's prerogative" to address. (App. 86.)

EPA rounded out its explanation of its decision with a boilerplate recitation of the administration's alternative approach to climate change, which relies on research, voluntary measures by industry, and public-private partnerships. (App. 88-92.)

As a separate ground for its decision, EPA asserted that it simply has no legal authority to regulate air pollutants associated with climate change. In so saying, EPA reversed its

prior legal position, provided to Congress on multiple occasions, that the Clean Air Act does provide that authority.[2] (App. 68-79.)

C. The Court of Appeals' Decision

Judge Randolph authored the Court's lead opinion, as well as its judgment. Without resolving whether EPA had statutory authority, Judge Randolph voted to uphold the agency's decision based on the agency's "'policy' considerations." (App. 13-15.) He noted that these considerations included, but were not limited to, the existence of uncertainty, saying "[i]t is . . . not accurate to say . . . that the EPA Administrator's refusal to regulate rested entirely on scientific uncertainty. . .." (App. 14-15.) Judge Randolph concluded that section 202(a)(1) "does not require the Administrator to exercise his discretion solely on the basis of his assessment of scientific evidence." (App. 13.) He found that EPA's other policy considerations – concerns about piecemeal regulation, worries about effects on international treaty negotiations and technological feasibility, and a preference for alternative voluntary approaches – were all factors that the agency was entitled to consider in coming to a

---

[2] *See* Testimony of Gary S. Guzy, EPA, General Counsel, Joint Hearing of the House Subcomm. on Nat'l. Econ. Growth, Natural Res. and Regulatory Affairs of the Comm. on Gov't Reform and the House Subcomm. on Energy and Env't of the Comm. on Sci. (Oct. 6, 1999); Letter from Gary S. Guzy, EPA General Counsel, to Rep. David M. McIntosh, Chairman, Subcommittee on National Economic Growth, Natural Resources, and Regulatory Affairs, House Committee on Government Reform (July 12, 2000). *See also* App. 68-69 (rescinding EPA's earlier conclusions).

decision. (App. 13-15.) In fact, Judge Randolph concluded that under section 202(a)(1), EPA "could take into account "the sort of policy judgments Congress makes when it decides whether to enact legislation regulating a particular area." (App. 13.)

Judge Sentelle dissented because of his view that the Court lacked jurisdiction. He nevertheless joined in Judge Randolph's judgment denying the petitions for review on the merits. (App. 16-20.)

Judge Tatel would have granted the petition for review. In a dissenting opinion, Judge Tatel detailed how the Court's jurisdiction was not in doubt, how EPA plainly had statutory authority to regulate air pollutants associated with climage change, and how the agency's decision not to regulate these pollutants rested on policy considerations that fell outside the range of discretion delegated by Congress. (App. 21-58.)

D. The Court of Appeals' Denial of Rehearing and Rehearing *En Banc*.

By a 2-1 vote, the panel denied rehearing (App. 98), and by a 4-3 vote, the full Court denied *en banc* review. (App. 94-95.) Judge Tatel wrote an opinion, joined by Judge Rogers, dissenting from the denial of rehearing *en banc*. (App. 96-97.) Judge Tatel stated that he would have granted *en banc* review because:

> the case involves the threat of global warming and its attendant consequences for human health and the environment, and therefore presents an issue of exceptional importance. . . . Indeed, if global warming

> is not a matter of exceptional importance, then those words have no meaning.

(internal cite omitted)(App. 96).

Reasons for Granting the Petition

Like Melville's scrivener, Bartleby, EPA may as well have explained its resistance to fulfilling its statutory obligations under the Clean Air Act with the simple reply: "I would prefer not to." And, like Bartleby's flummoxed boss, the court below let this answer suffice.

This was a significant mistake. The provision under which EPA made its decision, section 202(a)(1) of the Clean Air Act, is crystalline: EPA is to decide whether to regulate an air pollutant emitted by motor vehicles on the basis of its judgment whether public health or welfare may reasonably be anticipated to be endangered by the pollution. Section 202(a)(1) says not a word about technological judgments, international treaty negotiations, private-public partnerships, or any other of the myriad factors EPA cited in deciding not to regulate here.

The unidimensional simplicity of section 202(a)(1) was no accident, as the neighboring provisions of section 202 make clear. These adjacent provisions detail the "policy" factors for EPA to consider when setting and implementing the standards triggered by section 202(a)(1). But these factors are nowhere to be found in the "endangerment" standard of section 202(a)(1). By allowing EPA to import into section 202(a)(1) policy factors not enumerated there, the appeals court has sanctioned a large-scale and unwholesome shift of power from

Congress (which, after all, wrote section 202(a)(1)) to the agency. The court's decision is seriously out of step with this Court's precedents counseling judicial modesty in the face of pellucid statutory language.

The other ground on which EPA rested its decision was that it lacked any statutory authority to regulate air pollutants associated with climate change. EPA's claim is contradicted by the plain language of the Clean Air Act. Because EPA's interpretation of the Act is based almost entirely on its reading of *Brown & Williamson*, 529 U.S. 120, the Court's review of this question is necessary to prevent the agency from continuing to claim that a decision of this Court prevents it from taking regulatory action to address climate change.

I. IN UPHOLDING EPA'S DECISION BASED ON FACTORS NOT MENTIONED IN THE RELEVANT STATUTORY PROVISION, THE LEAD OPINION BELOW DRAMATICALLY DEPARTED FROM THIS COURT'S PRECEDENTS.

This Court has made plain that the judicial role in statutory interpretation begins, and often ends, with the statute's language. *See, e.g., Consumer Product Safety Comm'n v. GTE Sylvania*, 447 U.S. 102, 108 (1980)(speaking for a unanimous Court, Justice Rehnquist observed: "[T]he starting point for interpreting a statute is the language of the statute itself. Absent a clearly expressed legislative intention to the contrary, that language must ordinarily be regarded as conclusive."). In trying to discern a statute's meaning, the Court has often found it helpful to compare the language of the statutory provision in question with language found elsewhere in the statute: "it is a

general principle of statutory construction that when one statutory section includes particular language that is omitted in another section of the same Act, it is presumed that Congress acted intentionally and purposely." *Barnhardt v. Sigmund Coal*, 534 U.S. 438, 440-41 (2002), *citing Russello v. United States*, 464 U.S. 16, 23 (1983).

Notably, these principles have been decisive in shaping this Court's jurisprudence under the Clean Air Act. Where Congress has listed certain factors as relevant in one part of the Act, and not in another, this Court has consistently respected this legislative choice. *See Whitman v. American Trucking Ass'ns*, 531 U.S. 457, 464-71 (2001); *General Motors Corp. v. United States*, 496 U.S. 530, 538, 541 (1990); *Union Elec. Co. v. EPA*, 427 U.S. 246, 257 (1976).

In this case, the lead opinion in the D.C. Circuit failed to follow this well-worn path. Section 202(a)(1) includes only endangerment to public health or welfare as the criterion in deciding whether to regulate air pollution from motor vehicles. Once the threshold of endangerment has been crossed, other factors such as technological feasibility, cost, and lead-time concerns are relevant when establishing the standards under the other provisions of section 202. *See supra*, at 5. Nevertheless, the lead opinion allowed EPA's decision to stand based on reference to "'policy' considerations" not mentioned in section 202(a)(1).

The one factor mentioned by EPA that has anything to do with the endangerment standard of section 202(a)(1) is scientific uncertainty. But even as to this factor, EPA failed to

apply the statutory standard. Under this standard, the mere existence of uncertainty is not a bar to regulation or an excuse for inaction. Rather, the endangerment standard authorizes "regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable." *Ethyl Corp. v. EPA*, 541 F.2d at 25. Indeed, in 1977, Congress amended section 202(a)(1) "to support the views expressed" in *Ethyl*. H.R. Rep. 95-294, at 49. Specifically, "[i]n order to emphasize the precautionary or preventive purpose of the act (and, therefore, the Administrator's duty to assess risks rather than wait for proof of actual harm), the committee not only retained the concept of endangerment to health; the committee also added the words 'may reasonably be anticipated.'" *Id.*, at 51.

Moreover, as the lead opinion expressly found, EPA did not rely solely on uncertainty in coming to its decision. (App. 14-15.) Instead, it relied on uncertainty in combination with the other factors clearly having no relevance to the endangerment finding of section 202(a)(1). (App. 82-88.) The consideration of statutorily excluded factors taints EPA's entire decision; we cannot know what EPA would have done if it had exercised its judgment in light of the only legally relevant consideration – endangerment of public health or welfare – and courts cannot supply an answer EPA itself did not give. *See, e.g., SEC v. Chenery, Corp.*, 318 U.S. 80, 93-95 (1943).

An administrative agency simply cannot rest its decisions on factors which Congress has not intended it to consider. *Motor Vehicle Mfrs. Ass'n of U.S. v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983). Section 202(a)(1) entrusts to the Administrator's "judgment" the threshold question of whether

endangerment is occurring. But, as Judge Tatel observed, the statute provides the Administrator "no discretion either to base that judgment on reasons unrelated to this standard or to withhold judgment for such reasons." (App. 46.) By relying on these extra-statutory "policy considerations" in deciding not to regulate:

> In effect, EPA has transformed the limited discretion given to the Administrator under section 202 -- the discretion to determine whether or not an air pollutant causes or contributes to pollution which may reasonably be anticipated to endanger public health or welfare -- into the discretion to withhold regulation because it thinks such regulation bad policy. But Congress did not give EPA this broader authority, and the agency may not usurp it.

(App. 45)(Tatel, J. dissenting).

II. EPA MISREAD *FDA v. BROWN & WILLIAMSON TOBACCO CORP.* IN CONCLUDING THAT IT LACKS AUTHORITY TO REGULATE AIR POLLUTANTS ASSOCIATED WITH CLIMATE CHANGE.

EPA's contention that it lacks statutory authority to regulate air pollutants associated with climate change is belied by the plain language of the Clean Air Act.[3] The agency based its

---

[3] Because the court of appeals upheld EPA on the merits by denying the petition for review, this Court may address the scope of EPA's authority even though this question – fully briefed below – was not actually reached by the court. *Cf. Pollard v. United States*, 352 U.S. 354, 359 (continued...)

misinterpretation on a misreading of this Court's decision in *Brown & Williamson*, 529 U.S. 120. Unless this Court accepts review, EPA will continue to justify its inaction based on its reading of the Court's precedent.

Section 202(a)(1) of the Act requires the EPA Administrator to promulgate motor vehicle emissions standards for "any air pollutant" that he determines "may reasonably be anticipated to endanger public health or welfare." By using the word "any," Congress demonstrated its intent to provide EPA expansive authority, not to limit the agency's jurisdiction to only certain kinds of air pollutants. *See Dept. of HUD v. Rucker*, 535 U.S. 125, 131 (2002)("the word 'any' has an expansive meaning, that is, 'one or some indiscriminately of whatever kind'")(internal quotation omitted). As noted above (*supra* at 6), section 302(g) of the Act defines "air pollutant" comprehensively, and each of the four pollutants associated with climate change and emitted by motor vehicles is plainly covered by this definition. As the EPA General Counsel recognized in 1998, carbon dioxide, the most prevalent of these pollutants, is a "physical [and] chemical . . . substance which is emitted into . . . the ambient air."[4] Nowhere in its denial of the rulemaking petition did the agency attempt to challenge that self-evident conclusion.

---

[3] (...continued)
(1957)(reaching the merits even of arguments not briefed below).

[4] Memorandum of Jonathan Z. Cannon, General Counsel, to Carol M. Browner, Administrator, *EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources* (April 10, 1998), p. 2.

EPA nevertheless maintains that there is something special about the nature of the harm that these substances cause that negates the agency's jurisdiction over them. (App. 71-73.) But in fact they cause the kinds of harm that are expressly set forth in section 302(h), which states that effects on "welfare" include effects on "climate." By including effects on "climate" within the "welfare" effects that the agency is charged with preventing, Congress has expressly conferred authority to regulate air pollutants that adversely affect "climate."[5]

The language of section 202(a)(1) is so plain that in the court of appeals EPA made not a single argument that the statutory text supported its position (or even that the words were ambiguous). Instead, the agency belittled the very idea of textual analysis, referring to plain language arguments as "narrow semantic analyses." EPA brief below at 55.

In lieu of examining the words that Congress chose, EPA argued that interpreting the Act as providing regulatory authority would have such sweeping impacts that Congress could not have intended this result absent lock tight evidence of specific intent. (App. 75-79) EPA based this argument almost

---

[5] In addition to direct effects on "climate," climate change endangers "welfare" through many of the other effects enumerated in section 302(h) [42 U.S.C. § 7602(h)], including effects on "weather" (*e.g.*, increased storm activity and changes in rainfall or drought patterns), "damage to and deterioration of property," and "effects on crops." Further, emissions that cause climate change endanger "public health" in several ways, *e.g.*, by raising air temperature so as to increase the severity of health-damaging smog episodes. Intergovernmental Panel on Climate Change, *Third Assessment Report* (2001), Working Group II Technical Survey, at 43.

entirely on a single case, *Brown & Williamson*, 529 U.S. 120. But as Judge Tatel concluded, "EPA's reliance on *Brown & Williamson* is misplaced." (App. 38.) In fact, the legal principles of that case undercut, rather than support, EPA's claim that it lacks authority.

Brown & Williamson concluded that the Food, Drug and Cosmetic Act (FDCA) was unambiguous and that Congress had "directly spoken to the issue here and precluded the FDA's jurisdiction to regulate tobacco products." 529 U.S. at 133. Central to the Court's analysis was the fact that the FDA had for more than sixty years held the position that it had no authority to regulate tobacco products under the FDCA and that, over this period, Congress had repeatedly enacted tobacco-specific legislation that ratified the FDA's longstanding interpretation. The Court concluded that if tobacco products were subject to the FDCA, then the FDA would have no other option than to ban them, a drastic result that was contradicted by the tobacco-specific enactments that were all premised on tobacco's remaining legally for sale. The Court thus held that the FDA's reinterpretation of its authority could not stand in the face of these enactments. *See* 529 U.S. at 154-57.

The *Brown & Williamson* analogy that EPA attempts to draw breaks down under even a cursory examination. Before the decision here under review, EPA had previously maintained that it possessed authority to regulate air pollutants associated with climate change. EPA took the opposite view for the first time in this decision. Further, Congress has never – before or after this decision – enacted any legislation premised on EPA's "no authority" interpretation. Moreover, in sharp contrast to the

complete ban on tobacco products that would have resulted from regulating cigarettes, regulating air pollutants associated with climate change under section 202(a)(1) of the Clean Air Act would result only in EPA's setting technologically and economically feasible standards – something the agency has done for decades for other tailpipe pollutants.[6]

While attempting to clothe itself in *Brown & Williamson*, EPA has simply not shown that its having authority to regulate air pollutants associated with climate change would "contradict" other Congressional enactments. While the agency has cited various enactments that call for "non-regulatory responses" to global warming such as further studies,[7] each of these statutes is fully compatible with EPA having underlying authority to regulate air pollutants associated with climate change. In fact, one of the statutes that EPA cites makes this point expressly:

> Nothing in this subchapter shall be construed, interpreted, or applied to preclude or delay the planning

---

[6] Section 202 includes protections designed to prevent severe economic impacts from occurring. *See* 42 U.S.C. § 7521(a)(2)(new emission standards are to "take effect after such period as the Administrator finds necessary to permit the development and application of the requisite technology, giving appropriate consideration to the cost of compliance within such period.").

[7] *See* National Climate Program Act of 1978, Pub. L. No. 95-367, 92 Stat. 601; Global Climate Protection Act of 1987, Pub. L. No. 100-204, §§ 1101-1106, 101 Stat. 1331, 1407-09; Global Change Research Act of 1990, Pub. L. No. 101-606, 104 Stat. 3096; Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776.

> or implementation of any Federal action designed, in whole or in part, to address the threats of stratospheric ozone depletion or global climate change.

Global Climate Change Research Act of 1990, 15 U.S.C. § 2938(c).

Nor does the Energy Policy and Conservation Act ("EPCA"), 49 U.S.C. §§ 32901-32919, the statute authorizing the Secretary of Transportation to set automobile fuel economy standards, provide EPA any help for disclaiming its authority under the Clean Air Act. Not only is there nothing in EPCA that limits EPA's authority to set motor vehicle emission standards for air pollutants associated with climate change, but EPCA in fact expressly recognizes that motor vehicle standards set by other agencies may affect fuel economy. 49 U.S.C. § 32902(f). Congress has simply not erected any bar to the agency's making use of the authority that the plain and unambiguous language of § 202(a)(1) provides.

The real import of *Brown & Williamson* to this case is quite different from the one EPA has attempted to draw. Fundamentally, *Brown & Williamson* stands for the proposition that an agency cannot stretch its authority to usurp power that a statute does not give it, no matter how compelling the agency feels is the need to respond to a social or economic problem. By the same token, an agency cannot shrink its authority and deny power that a statute plainly does give it. That is

Congress's decision alone.[8]

III. THE ISSUES RAISED BY THIS CASE MERIT THIS COURT'S REVIEW BECAUSE THEY GO TO THE HEART OF EPA'S STATUTORY RESPONSIBILITIES TO ADDRESS THE MOST PRESSING ENVIRONMENTAL CHALLENGE OF OUR TIME.

The statutory questions presented by this case are themselves important federal questions that have not been, but should be, settled by this Court. This Court's review is warranted because the answers to these questions offered by the court of appeals (and EPA) flout the Court's guidance on statutory interpretation and administrative law. But the Court's review is also merited by the important real world context in which the questions arise. Simply put, this case goes to the heart of EPA's statutory responsibilities to deal with the most pressing environmental problem of our time.

---

[8] EPA's argument that there cannot be regulatory authority without specific intent is curious for two reasons beyond its misreading of *Brown & Williamson*. First, Congress has in fact been quite specific in demonstrating its intent that effects on "climate" fall within the scope of the Act. Second, even if this were not the case, this Court has consistently held that an agency can regulate a new subject matter in the absence of proof of specific congressional intent directed at the particular problem. *See, e.g., Diamond v. Chakrabarty*, 447 U.S. 303, 314-15 (1980) (rejecting argument that because genetic technology was unforseen when broad patent statute was enacted, micro-organisms could not be patented until Congress expressly authorized it). As this Court observed in 2001, "the fact that a statute can be applied in situations not expressly anticipated by Congress does not demonstrate ambiguity . . .. It demonstrates breadth." *PGA Tour, Inc. v. Martin*, 532 U.S. 661, 689 (2001)(internal citation and quotation omitted).

There can be no reasonable debate about the exceptional importance of the problem of climate change. In fact, EPA conceded the need to address the problem in the proceedings below: "We agree with the President that 'we must address the issue of global climate change' (February 14, 2002)." (App. 82)(*quoting* President George W. Bush). *See also* March 3, 2001 Statement of then-EPA Administrator Christine Todd Whitman ("If we fail to take the steps necessary to address the very real concern of global climate change, we put our people, our economies, and our way of life at risk.").[9] Indeed, the very National Academy of Sciences report on which EPA claimed to rely opens with the statement: "Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise." National Research Council, *Climate Change Science: An Analysis of Some Key Questions* (2001), at 1.[10]

---

[9] Remarks delivered at the G8 Environmental Ministerial Meeting Working Session on Climate Change, Trieste, Italy (March 3, 2001), available at: http://yosemite1.epa.gov/administrator/speeches.nsf/b1ab9f485b098972852562e7004dc686/36bca0e3a69a0d8b85256a41005d2e63?OpenDocument.

[10] The scientific basis for concern is well documented in the administrative record, including through various official governmental reports. A prime example is the 2002 report that the United States submitted pursuant to its reporting obligations under the 1992 climate change treaty signed by President George H.W. Bush and ratified by the Senate. *U.S. Climate Action Report 2002* (CAR). The report was produced by several federal agencies

(continued...)

Given that the D.C. Circuit has exclusive jurisdiction to review EPA's national regulatory decisions, there is no good reason to put off review in order to let the issues presented percolate through the lower courts. At the same time, there are important reasons for this Court to accept review now. The court of appeals' ruling effectively puts motor vehicle sources, which account for over a quarter of U.S. greenhouse gas emissions, beyond EPA's regulatory reach for the indefinite future. And without this Court's review, EPA will continue to disclaim its statutory role in evaluating the dangers posed by such pollutants from any source. In fact, EPA only recently refused to even consider greenhouse gas emissions limits on new power plants, stating that it "does not presently have the authority to set [New Source Performance Standards] to regulate CO_2 or other greenhouse gases that contribute to global climate change." 71 Fed. Reg. 9869/3 (February 27, 2006). This Court's review is warranted to give the issues raised by this case the careful hearing they deserve.

---

[12] (...continued)
with EPA taking the lead. In a portion of the report drafted by EPA, the report specifically identified numerous adverse effects that the accumulation of greenhouse gas emissions is likely or very likely to cause. These include: in the Northeast, Southeast, and Midwest, "[r]ising temperatures are likely to increase the heat index dramatically in the summer;" in the Appalachians, "[w]armer and moister air is likely to lead to more intense rainfall events in mountainous areas, increasing the potential for flash floods;" in the Great Lakes, "[l]ake levels are likely to decline due to increased warm-season evaporation, leading to reduced water supply and degraded water quality;" and coastal communities "are more likely to suffer damage from the increasing intensity of storms." CAR at 110.

Meanwhile, delay has serious potential consequences. Given that air pollutants associated with climate change are accumulating in the atmosphere at an alarming rate, the window of opportunity in which we can mitigate the dangers posed by climate change is rapidly closing. *See, e.g.*, Intergovernmental Panel on Climate Change, *Third Assessment Report* (2001), Synthesis Report, Summary for Policymakers, at 19, 21 (explaining how significant reductions in greenhouse gas emissions are needed in the short term to stabilize atmospheric concentrations, and how a delay in implementing emission reductions will result in increased extent and magnitude of adverse impacts). As the heads of the national academies of science of eleven different countries, including the United States, recently stated: "Failure to implement significant reductions in net greenhouse gas emissions now, will make the job much harder in the future." Joint Science Academies' Statement: Global Response to Climate Change (July 2005)(footnotes omitted). Available at: http://nationalacademies.org/onpi/06072005.pdf.

Seven years have already passed since EPA received the petition for rulemaking that spawned this litigation. In reliance on incorrect legal analyses and *ultra vires* policy rationales, EPA has squandered nearly a decade. This delay, itself, has the effect of compounding the problem by narrowing our ability to mitigate it. As the EPA Administrator who served under Presidents Nixon and Ford recently stated: "[t]o sit back and push this away and deal with it sometime down the road is dishonest and self-destructive." Statement of Russell E. Train. *The New York Times*, "6 Ex-Chiefs of EPA Urge Action on

Greenhouse Gases" (January 19, 2006), at 19. If this Court declines to resolve the issues presented now, we will see the cycle of delay repeat itself. Waiting for the issues to arise in other contexts would likely drastically limit our ability to address the growing crisis.

Thus, there are critically important reasons not only for this Court to resolve the questions presented, but also to reach them in the current case.

Conclusion

The petition for a writ of certiorari should be granted.

Respectfully submitted,

THOMAS F. REILLY
Attorney General
Comm. of Massachusetts

LISA HEINZERLING
Georgetown Univ. Law Center
600 New Jersey Ave. N.W.
Washington, DC 20001
(202) 662-9115

JAMES R. MILKEY
Counsel of Record
WILLIAM L. PARDEE
CAROL IANCU
Assistant Attorneys General
One Ashburton Place
Boston, MA 02108
(617) 727-2200

Counsel for Commonwealth of Massachusetts

BILL LOCKYER
Attorney General of California
1515 Clay Street, 20th Floor
P.O. Box 70550
Oakland, CA 94612
(510) 622-2133

G. STEVEN ROWE
Attorney General of Maine
State House Station #6
Augusta, ME 04333
(207) 626-8545

RICHARD BLUMENTHAL
Attorney General of Connecticut
P.O. Box 120
55 Elm Street
Hartford, CT 06141
(860) 808-5250

PATRICIA A. MADRID
Attorney General of New Mexico
P.O. Drawer 1508
Sante Fe, NM 87504
(505) 827-6010

LISA MADIGAN,
Attorney General of Illinois
188 West Randolph Street
20th Floor
Chicago, IL 60601
(312) 814-3369

ELIOT SPITZER
Attorney General of New York
120 Broadway
New York, NY 10271
(212) 416-8450

ZULIMA V. FARBER
Attorney General of New Jersey
Richard J. Hughes Justice Complex
25 Market St., P.O. Box 093
Trenton, NJ 08625
(609) 633-8713

HARDY MYERS
Attorney General of Oregon
Oregon Department of Justice
1162 Court Street, Suite 100
Salem, OR 97310
(503) 229-5725

PATRICK C. LYNCH
Attorney General
of Rhode Island
150 South Main Street
Providence, RI
(401) 274-4400

MALAETASI M. TOGAFAU
Attorney General of
American Samoa
P.O. Box 7
Pago Pago, American Samoa
96799
011 (684) 633-4163

WILLIAM H. SORRELL
Attorney General of Vermont
109 State Street
Montpelier, VT 05609
(802) 828-5518

MICHAEL CARDOZO
Corporation Counsel
City of New York
100 Church Street
New York, NY 10007
(212) 676-8517

ROB MCKENNA
Attorney General of
Washington
P.O. Box 40117
Olympia, WA 98504
(360) 586-4613

RALPH S. TYLER III
City Solicitor
City of Baltimore
Baltimore City Dept. of Law
100 Holliday Street
Baltimore, MD 21202
(410) 396-4094

ROBERT J. SPAGNOLETTI
Attorney General of the
District of Columbia
441 Fourth Street, N.W.
6th Floor South
Washington, DC 20001
(202) 724-5667

DAVID BOOKBINDER
408 C Street, NE
Washington, DC 20002
(202) 548-4598

Counsel for Center for Biological Diversity, Conservation Law Foundation, Sierra Club; National Environmental Trust, U.S. Public Interest Research Group, Union of Concerned Scientists

HOWARD FOX
1625 Massachusetts Ave., NW, Suite 702
Washington, DC 20036
(202) 667-4500

Counsel for Sierra Club

JAY TUTCHTON
Environmental Law Clinic
University of Denver, College of Law
2255 E. Evans Ave.
Denver, CO 80208
(303) 871-6034

Counsel for Center for Biological Diversity

JOSEPH MENDELSON III
660 Pennsylvania Ave. SE
Washington, DC 20003
(202) 547-9359

Counsel for International Center for Technology Assessment, Center for Food Safety, Environmental Advocates, Greenpeace

DAVID DONIGER
1200 New York Ave.
Washington, DC 20005
(202) 289-2403

Counsel for Natural Resources Defense Council

JAMES B. TRIPP
257 Park Avenue South
17th Floor
New York, NY 10010
(212) 505-2100

Counsel for Environmental Defense

SETH KAPLAN
62 Summer Street
Boston, MA 02110
(617) 350-0990

Counsel for Conservation Law Foundation

JOHN M. STANTON
MARK WENZLER
1200 18th Street, N.W.
Washington, DC 20036
(202) 887-8800

Counsel for National Environmental Trust

BRIAN S. DUNKIEL
Shems Dunkiel Kassel & Saunders PLLC
91 College Street
Burlington, VT 05401
(802) 860-1003

Counsel for Friends of the Earth

KATHERINE MORRISON
218 D Street, SE
Washington, DC 20003
(202) 546-9707 Ext. 318

Counsel for U.S. Public Interest Research Group

JULIE M. ANDERSON
1707 H St., N.W. Suite 600
Washington, DC 20006
(202) 223-6133 Ext. 109

Counsel for Union of Concerned Scientists

March 2, 2006

APPENDIX TABLE OF CONTENTS

Opinions of the United States Court of Appeals for the D.C. Circuit 1

Administrative decision below (EPA denial of rulemaking petition) 59

Order of United States Court of Appeals for the D.C. Circuit denying petitioners' petition for rehearing *en banc* 94

Statement by Judge Tatel, joined by Judge Rogers, dissenting from the denial of rehearing *en banc* 96

Order of United States Court of Appeals for the D.C. Circuit denying petitioners' petition for rehearing . 98

Judgment of the United States Court of Appeals for the D.C. Circuit 99

Statutes Involved 101

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Argued April 8, 2005

Decided July 15, 2005
Reissued September 13, 2005

No. 03-1361

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

ALLIANCE OF AUTOMOBILE MANUFACTURERS, ET AL.,
INTERVENORS

Consolidated with Nos.
03-1362, 03-1363, 03-1364, 03-1365, 03-1366, 03-1367,
03-1368

On Petitions for Review of an Order of the
Environmental Protection Agency

James R. Milkey and *Howard Fox* argued the cause for petitioners. With them on the briefs were *Thomas F. Reilly*, Attorney General, Attorney General's Office of the Commonwealth of Massachusetts, *William L. Pardee*, Assistant Attorney General, *Joseph Mendelson, III*, *David Bookbinder*, *Bill Lockyer*, Attorney General, Attorney General's Office of the

State of California, *Nicholas Stern* and *Marc N. Melnick*, Deputy Attorneys General, *David Doniger, Richard Blumenthal*, Attorney General, Attorney General's Office of the State of Connecticut, *Kimberly Massicotte* and *Matthew Levine*, Assistant Attorneys General, *Peter C. Harvey*, Attorney General, Attorney General's Office of the State of New Jersey, *Stefanie A. Brand*, Deputy Attorney General, *Hardy Myers*, Attorney General, Attorney General's Office of the State of Oregon, *Philip Schradle*, Special Counsel, *Lisa Madigan*, Attorney General, Attorney General's Office of the State of Illinois, *Gary Feinerman*, Solicitor General, *Gerald T. Karr* and *Thomas E. Davis*, Assistant Attorneys General, *Patricia A. Madrid*, Attorney General, Attorney General's Office of the State of New Mexico, *Stuart M. Bluestone*, Deputy Attorney General, *Patrick C. Lynch*, Attorney General, Attorney General's Office of the State of Rhode Island, *Tricia K. Jedele*, Special Assistant, *G. Steven Rowe*, Attorney General, Attorney General's Office of the State of Maine, *Gerald D. Reid*, Assistant Attorney General, *Eliot Spitzer*, Attorney General, Attorney General's Office of the State of New York, *Peter Lehner* and *J. Jared Snyder*, Assistant Attorneys General, *William H. Sorrell*, Attorney General, Attorney General's Office of the State of Vermont, *Erick Titrud* and *Kevin O. Leske*, Assistant Attorneys General, *Rob McKenna*, Attorney General, Attorney General's Office of the State of Washington, *David K. Mears*, Assistant Attorney General, *John Hogrogian*, Assistant Corporation Counsel, Corporation Counsel of the City of New York, *Julie M. Anderson, Fiti A. Sunia*, Attorney General, Attorney General's Office of the American Samoa, *Ralph S. Tyler, III*, Solicitor, City of Baltimore, *William Phelan, Jr.*, Counsel, *James B. Tripp, Robert J. Spagnoletti*, Attorney General, Attorney General's Office of the District of Columbia, *Edward E. Schwab*, Deputy Attorney General, and *Donna M. Murasky*, Senior Litigation Counsel.

Rebecca L. Bernard and *Jeremy Kyle Kinner* were on the brief of *amici curiae* Indigenous Environmental Network, REDOIL and Physicians for Social Responsibility.

Jeffrey Bossert Clark, Deputy Assistant Attorney General, U.S. Department of Justice, argued the cause for respondent. With him on the brief were *Thomas L. Sansonetti*, Assistant Attorney General, *Jon M. Lipshultz*, Attorney, *Ann R. Klee*, General Counsel, U.S. Environmental Protection Agency, and *John T. Hannon* and *Nancy Ketcham-Colwill*, Counsel.

Neil D. Gordon, Assistant Attorney General, Attorney General's Office of the State of Michigan, argued the cause for intervenors States of Michigan, et al., and *amicus curiae* State of Indiana. With him on the briefs were *Alan F. Hoffman*, Assistant Attorney General, *Jane E. Atwood*, Assistant Attorney General, Attorney General's Office of the State of Texas, *Douglas Conde*, Deputy Attorney General, Attorney General's Office of the State of Idaho, *Charles M. Carvell*, Assistant Attorney General, Attorney General's Office of the State of North Dakota, *Fred Nelson*, Assistant Attorney General, Attorney General's Office of the State of Utah, *Roxanne Giedd*, Deputy Attorney General, Attorney General's Office of the State of South Dakota, *Steven E. Mulder*, Assistant Attorney General, Attorney General's Office of the State of Alaska, *David W. Davies*, Attorney, Attorney General's Office of the State of Kansas, *David D. Cookson* and *Natalee J. Hart*, Assistant Attorneys General, Attorney General's Office of the State of Nebraska, *Dale T. Vitale*, Senior Deputy Attorney General, Attorney General's Office of the State of Ohio, and *Thomas M. Fisher*, Special Counsel, Attorney General's Office of the State of Indiana.

Norman W. Fichthorn, Allison D. Wood, William A. Anderson, II., Eric P. Gotting, Russell S. Frye, John L.

Wittenborn, William L. Fang, Dell E. Perelman, Leslie A. Hulse, Richard Wasserstrom, Harry M. Ng, Ralph J. Colleli, Jr., Jan S. Amundson, Quentin Riegel, Robin S. Conrad, John T. Whatley, Julie C. Becker, Douglas I. Greenhaus, Jed R. Mandel, Timothy A. French, Robert G. Slaughter, Mark J. Washko, and *Nick Goldstein* were on the brief of industry intervenors in support of respondent.

Daniel J. Popeo, Paul D. Kamenar, Peter Glaser, and *Douglas A. Henderson* were on the brief of amicus curiae Washington Legal Foundation in support of respondent.

Edward W. Warren and *Eric B. Wolff* were on the brief of amicus curiae John D. Dingell (D-Michgan) in support of denial of petitions for review.

Before: SENTELLE, RANDOLPH, and TATEL, *Circuit Judges*.

Judgment of the Court filed by *Circuit Judge* RANDOLPH.

Opinion filed by *Circuit Judge* RANDOLPH.

Opinion dissenting in part and concurring in the judgment filed by *Circuit Judge* SENTELLE.

Opinion dissenting in Nos. 03-1361, 03-1362, 03-1363, and 03-1364 filed by *Circuit Judge* TATEL.

RANDOLPH, *Circuit Judge*: Petitioners are twelve states, three cities, an American territory, and numerous environmental organizations. They are opposed by the Environmental Protection Agency as respondent, and ten states and several trade associations as intervenors. The controversy is about EPA's denial of a petition asking it to regulate carbon dioxide (CO_2) and other greenhouse gas emissions from new motor

vehicles under § 202(a)(1) of the Clean Air Act, 42 U.S.C. § 7521(a)(1). EPA concluded that it did not have statutory authority to regulate greenhouse gas emissions from motor vehicles and that, even if it did, it would not exercise the authority at this time. 68 Fed. Reg. 52,922 (Sept. 8, 2003).

I.

We should say a few words about our jurisdiction under the Clean Air Act to review an EPA denial of a petition for rulemaking. Section 307(b)(1), 42 U.S.C. § 7607(b)(1), gives this court exclusive jurisdiction over "nationally applicable regulations promulgated, or final action taken, by the Administrator" under chapter 85 of the Act. The district courts, on the other hand, have jurisdiction over citizen suits to compel EPA to perform nondiscretionary acts or duties. 42 U.S.C. § 7604(a)(2); *see Sierra Club v. Thomas*, 828 F.2d 783, 787-92 (D.C. Cir. 1987). Because EPA refused to promulgate "nationally applicable regulations" after being asked to do so, we have jurisdiction only if EPA thereby engaged in "final action." We can be sure that its denial of the rulemaking petition was "final." But did this constitute agency "action"? To answer that question we must consult the Administrative Procedure Act -- specifically 5 U.S.C. § 551(13). The term "action" in § 307(b)(1) of the Clean Air Act, like the term "final," carries its traditional meaning in administrative law. *See Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 478 (2001); *Indep. Equip. Dealers Ass'n v. EPA*, 372 F.3d 420, 428 (D.C. Cir. 2004); *Sierra Club v. Gorsuch*, 715 F.2d 653, 656-57 (D.C. Cir. 1983). Section 551(13) of the APA defines "agency action" as "the whole or a part of an agency rule, order, license, sanction, relief, or the equivalent or *denial thereof*, or failure to act" (italics added). While § 307 of the Clean Air Act makes several APA provisions inapplicable -- namely, 5 U.S.C. §§ 553-557 & 706 -- APA § 551 is not among them. EPA's denial of

the rulemaking petition was therefore "final action," and since the petition sought regulations national in scope, § 307(b)(1) confers jurisdiction on this court to hear these consolidated cases.

Another, related, point needs to be mentioned. Several of the petitions for judicial review treated a memorandum of EPA's General Counsel, Robert Fabricant, as "final action taken, by the Administrator" under § 307(b)(1). The memorandum, dated August 28, 2003, and addressed to the EPA Administrator, was entitled "EPA's Authority to Impose Mandatory Controls to Address Global Climate Change under the Clean Air Act." The General Counsel, after analyzing § 202(a)(1) of the Clean Air Act, and other legislative and executive actions, stated his belief that the Act "does not authorize regulation to address global climate change." He therefore withdrew a contrary memorandum issued in 1998 by one of his predecessors.

The Fabricant memorandum, consisting of legal advice to the EPA Administrator, did not in itself constitute "final action" of the Administrator. To be sure, the Administrator adopted the "General Counsel's opinion" and relied on its analysis as one of the alternative grounds for rejecting the rulemaking petition. *See* 68 Fed. Reg. at 52,925. The Administrator's explanation incorporated many of the memorandum's passages verbatim, rephrased and reordered others, and expanded on the General Counsel's reasoning. Still, it is the Administrator's denial of the rulemaking petition, with the accompanying explanation, that represents the "final action" of the Administrator subject to judicial review under § 307(b)(1). The significance of the General Counsel's opinion, as set forth in his memorandum, is the Administrator's reliance on his reasoning in deciding the matter now before us.

There is an additional jurisdictional issue presented, but not under the Clean Air Act. EPA claims that petitioners lack standing under Article III of the Constitution. Standing exists only if the complainant has suffered an injury in fact, fairly traceable to the challenged action, and likely to be redressed by a favorable decision. *See Lujan v. Defenders of Wildlife,* 504 U.S. 555, 560 (1992). EPA's argument is that petitioners have not "adequately demonstrated" two elements of standing: that their alleged injuries were "caused by EPA's decision not to regulate emissions of greenhouse gases from mobile sources"; and that their injuries "can be redressed by a decision in their favor" by this court. Brief for Respondent at 16.

In anticipation of this argument, petitioners filed two volumes of declarations with the court, some containing lengthy exhibits. The declarations, from scientists, engineers, state officials, homeowners, users of the nation's recreational resources, and other individuals, predict catastrophic consequences from global warming caused by greenhouse gases, including loss of or damage to state and private property, frequent intense storm surge floods, and increased health care costs. Brief for Petitioners at 2-4.

For the causation and redressability aspects of standing, petitioners cite two of their declarations. One, from a climatologist, states that reductions in CO_2 and other greenhouse gases from vehicles in the United States would alone have a meaningful impact and would "delay and moderate many of the adverse impacts of global warming." He adds that if EPA took action to reduce such emissions, other countries would likely follow suit. The climatologist bases his predictions about future climate change on climate models and on "quantitative scenarios generated by the IPCC" -- the Intergovernmental Panel on Climate Change, established in 1988 by the United Nations and the World Meteorological Organization. The other declaration

is from a mechanical engineer. He states that, on the basis of his experience with controlling other pollutants, there is "no doubt that establishing emissions standards for pollutants that contribute to global warming would lead to investment in developing improved technologies to reduce those emissions from motor vehicles, and that successful technologies would gradually be mandated by other countries around the world."

We have held that, to establish standing, a petitioner challenging agency action has the same burden of production as "a plaintiff moving for summary judgment in the district court: it must support each element of its claim to standing 'by affidavit or other evidence.'" *Sierra Club v. EPA*, 292 F.3d 895, 899 (D.C. Cir. 2002) (quoting *Lujan*, 504 U.S. at 561). Petitioners' declarations do "support each element" of standing. But supporting an allegation is one thing; proving an allegation is quite another. *Lujan* holds that when a plaintiff's standing is challenged in a motion for summary judgment, the plaintiff "must 'set forth' by affidavit or other evidence 'specific facts,' Fed. Rule Civ. Proc. 56(e), which for purposes of the summary judgment motion will be taken as true." 504 U.S. at 561. If we were to analogize the situation here to one in which EPA filed such a summary judgment motion, we would conclude that petitioners had submitted enough evidence raising genuine issues of material fact to defeat the motion. *See* FED. R. CIV. P. 56©. But *Lujan* goes on to hold that at "the final stage" the evidence plaintiff presented at summary judgment "(if controverted) must be 'supported adequately by the evidence adduced at trial.'" 504 U.S. at 561 (quoting *Gladstone, Realtors v. Village of Bellwood*, 441 U.S. 91, 115 n.31 (1979)). One might say that in this case we are at the "final stage." But the analogy is not entirely apt. As an appellate court we do not conduct evidentiary hearings in order to make findings of fact. This is why, when *Sierra Club* spoke of "other evidence" relating to standing, the court had in mind evidence presented to

the agency. 292 F.3d at 899. Here, the administrative record contains a wealth of such "other evidence," and some of it contradicts petitioners' claim that greenhouse gas emissions from new motor vehicles have caused or will cause a significant change in the global climate. That is partly why EPA decided not to regulate at this time.

Steel Co. v. Citizens for a Better Environment, 523 U.S. 83 (1998), instructs federal courts to resolve Article III standing questions before proceeding to the merits of a case. The combination of *Lujan*, *Steel Co.*, and the factual overlap of the standing issues with EPA's justifications for not regulating greenhouse gases present us with three options. The first is to refer the standing issues to a special master for a factual determination. This would be, as one commentator has suggested, "folly." 13A CHARLES A. WRIGHT ET AL., FEDERAL PRACTICE AND PROCEDURE 2D § 3531.15, at 101 (1984). Such a proceeding would largely duplicate the proceedings on the rulemaking petition and to no good end. Another option would be to remand to EPA for a factual determination of causation and redressability. That too would make no sense. For one thing, judgments about standing are the responsibility of the federal courts. For another, EPA has already reached a decision about the state of the evidence regarding global warming from greenhouse gases. The third option is to proceed to the merits with respect to EPA's alternative decision not to regulate on the grounds, among others, that the effect of greenhouse gases on climate is unclear and that models used to predict climate change might not be accurate.

We have decided to follow the third course. *Steel Co.* endorses this approach with respect to questions of statutory standing. The Court explained that "the merits inquiry and the statutory standing inquiry often overlap" and "are sometimes identical, so that it would be exceedingly artificial to draw a

distinction between the two." 523 U.S. at 97 n.2. The Court's distinction of Article III standing cases rested on the premise that there would be no such overlap and that the issue of Article III standing would be entirely separate from the merits. *Id.* The Court did not say what the proper order of decision should be when, as in this case, that premise does not hold. In this highly unusual circumstance -- encountered for the first time in this court -- we will follow the statutory standing cases. We will therefore assume *arguendo* that EPA has statutory authority to regulate greenhouse gases from new motor vehicles.[1] The question we address is whether EPA properly declined to exercise that authority.

II.

Greenhouse gases trap energy, much like the glass panels of a greenhouse. The earth's surface is warmed by absorbing solar energy (visible light). The earth, in turn, radiates infrared energy (heat) back into space. A portion of the infrared radiation is trapped by greenhouse gas molecules, resulting in additional warming of the lower atmosphere and the earth's surface. This "greenhouse effect" is a natural phenomenon, without which the planet would be significantly colder and life as we know it would not be possible. EPA, *Global Warming -- Climate*, *at* http://yosemite.epa.gov/oar/globalwarming.nsf/content/climate.html.

---

[1] Relying on *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000), EPA concluded that in light of the enormous economic and political consequences of regulating greenhouse gas emissions, Congress would have been far more specific if it had intended to authorize EPA to regulate the subject under § 202(a)(1) of the Clean Air Act. 58 Fed. Reg. at 52,928. We express no view on the validity of EPA's analysis.

Petitioners sought to have EPA regulate, under § 202(a)(1) of the Clean Air Act, carbon dioxide (CO_2), and three other greenhouse gases: methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs).[2] In response to EPA's request for public comments on the 1999 petition for rulemaking, the agency received nearly 50,000 submissions. 68 Fed. Reg. at 52,924. Most were short expressions of support for the petition; many were nearly identical. *Id.* The comment period closed in May 2001. In the same month, the White House requested the National Academy of Sciences to assist the Administration in its review of climate change policy. The Academy "is a private, nonprofit, self-perpetuating society of distinguished scholars engaged in scientific and engineering research . . . ." NATIONAL RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE: AN ANALYSIS OF SOME OF THE KEY QUESTIONS, preface (2001). Under its congressional charter, issued in 1863, the Academy has a mandate to advise the federal government on scientific and technical matters when requested. The Academy's principal operating agency for providing such advice is its National Research Council. *Id.*

In denying the rulemaking petition, EPA found that the scientific comments petitioners and others submitted rested on information already in the public domain and did not add significantly to the body of knowledge available to the National Research Council when it prepared the report cited above. Since none of the comments caused EPA to question the Council's report, EPA decided to rely on the Council's "objective and independent assessment of the relevant science." 68 Fed. Reg. at 52,930.

---

[2] The rulemaking request and the papers submitted to this court focus on the effects of CO_2.

The National Research Council concluded that "a causal linkage" between greenhouse gas emissions and global warming "cannot be unequivocally established." NATIONAL RESEARCH COUNCIL, CLIMATE CHANGE SCIENCE, at 17. The earth regularly experiences climate cycles of global cooling, such as an ice age, followed by periods of global warming. *Id.* at 7. Global temperatures have risen since the industrial revolution, as have atmospheric levels of carbon dioxide. But an increase in carbon dioxide levels is not always accompanied by a corresponding rise in global temperatures. For example, although carbon dioxide levels increased steadily during the twentieth century, global temperatures decreased between 1946 and 1975. *Id.* at 16. Considering this and other data, the National Research Council concluded that "there is considerable uncertainty in current understanding of how the climate system varies naturally and reacts to emissions of greenhouse gases." *Id.* at 1. This uncertainty is compounded by the possibility for error inherent in the assumptions necessary to predict future climate change.[3] And, as the National Research Council noted,

---

[3] "As the NRC explained, predicting future climate change necessarily involves a complex web of economic and physical factors including: Our ability to predict future global anthropogenic emissions of GHGs and aerosols; the fate of these emissions once they enter the atmosphere (*e.g.*, what percentage are absorbed by vegetation or are taken up by the oceans); the impact of those emissions that remain in the atmosphere on the radiative properties of the atmosphere; changes in critically important climate feedbacks (*e.g.*, changes in cloud cover and ocean circulation); changes in temperature characteristics (*e.g.*, average temperatures, shifts in daytime and evening temperatures); changes in other climatic parameters (*e.g.*, shifts in precipitation, storms); and ultimately the impact of such changes on human health and welfare (*e.g.*, increases or decreases in agricultural productivity, human health impacts). The NRC noted, in particular, that '[t]he understanding of the relationships between weather/climate and human health is in its infancy and therefore the health consequences

past assumptions about effects of future greenhouse gas emissions have proven to be erroneously high. *Id.* at 19.

Relying on *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (en banc), petitioners challenge EPA's decision to forego rulemaking "[u]ntil more is understood about the causes, extent and significance of climate change and the potential options for addressing it." 68 Fed. Reg. at 52,931. In our view *Ethyl* supports EPA, not petitioners. Section 202(a)(1) directs the Administrator to regulate emissions that "in his judgment" "may reasonably be anticipated to endanger public health or welfare." Section 202(a)(1) was not at issue in *Ethyl*; the court mentioned an earlier version of that provision, in a footnote, only by way of analogy. 541 F.2d at 20 n.37. But what the court had to say about § 202(a)(1) is instructive. In requiring the EPA Administrator to make a threshold "judgment" about whether to regulate, § 202(a)(1) gives the Administrator considerable discretion. *Id.* Congress does not require the Administrator to exercise his discretion solely on the basis of his assessment of scientific evidence. *Id.* at 20. What the *Ethyl* court called "policy judgments" also may be taken into account. By this the court meant the sort of policy judgments Congress makes when it decides whether to enact legislation regulating a particular area. *Id.* at 26.

The EPA Administrator's analysis, although it did not mention *Ethyl*, is entirely consistent with the case. In addition to the scientific uncertainty about the causal effects of

---

of climate change are poorly understood' (p. 20). Substantial scientific uncertainties limit our ability to assess each of these factors and to separate out those changes resulting from natural variability from those that are directly the result of increases in anthropogenic GHGs." 68 Fed. Reg. at 52,930.

greenhouse gases on the future climate of the earth, the Administrator relied upon many "policy" considerations that, in his judgment, warranted regulatory forbearance at this time. 68 Fed. Reg. at 52,929. New motor vehicles are but one of many sources of greenhouse gas emissions; promulgating regulations under § 202 would "result in an inefficient, piecemeal approach to the climate change issue." 68 Fed. Reg. at 52,931. The Administrator expressed concern that unilateral regulation of U.S. motor vehicle emissions could weaken efforts to persuade developing countries to reduce the intensity of greenhouse gases thrown off by their economies. *Id.* Ongoing research into scientific uncertainties and the Administration's programs to address climate change -- including voluntary emission reduction programs and initiatives with private entities to develop new technology -- also played a role in the Administrator's decision not to regulate. 68 Fed. Reg. at 52,931-33. The Administrator pointed to efforts to promote "fuel cell and hybrid vehicles" and ongoing efforts to develop "hydrogen as a primary fuel for cars and trucks." 68 Fed. Reg. at 52,931. The Administrator also addressed the matter of remedies. Petitioners offered two ways to reduce CO_2 from new motor vehicles: reduce gasoline consumption and improve tire performance. As to the first, the Department of Transportation -- the agency in charge of fuel efficiency standards -- recently issued new standards requiring greater fuel economy, as a result of which millions of metric tons of CO_2 will never reach the stratosphere. *Id.* As to tire efficiency, EPA doubted its authority to regulate this subject as an "emission" of an air pollutant. *Id.* "With respect to the other [greenhouse gases] -- CH_4, N_2O, and HFCs -- petitioners make no suggestion as to how those emissions might be reduced from motor vehicles." *Id.*

It is therefore not accurate to say, as petitioners do, that the EPA Administrator's refusal to regulate rested entirely on

scientific uncertainty, or that EPA's decision represented an "open-ended invocation of scientific uncertainty to justify refusing to regulate," Brief for Petitioners at 51. A "determination of endangerment to public health," the court said in *Ethyl*, "is necessarily a question of policy that is to be based on an assessment of risks and that should not be bound by either the procedural or the substantive rigor proper for questions of fact." *Ethyl*, 541 F.2d at 24. And as we have held, a reviewing court "will uphold agency conclusions based on policy judgments" "when an agency must resolve issues 'on the frontiers of scientific knowledge.'" *Envtl. Def. Fund v. EPA*, 598 F.2d 62, 82 (D.C. Cir. 1978).

We thus hold that the EPA Administrator properly exercised his discretion under § 202(a)(1) in denying the petition for rulemaking. The petitions for review in Nos. 03-1365, 03-1366, 03-1367, and 03-1368 are dismissed, and the petitions for review in Nos. 03-1361, 03-1362, 03-1363, and 03-1364 are denied.

So ordered.

SENTELLE, *Circuit Judge, dissenting in part and concurring in the judgment*: As the majority's opinion observes, courts of the United States must resolve jurisdictional questions, including "Article III standing questions, before proceeding to the merits of a case." Opinion of Judge Randolph at 9 (citing *Steel Co. v. Citizens for a Better Environment*, 523 U.S. 83 (1998)). As the majority further observes, "[s]tanding exists only if the complainant has suffered an injury in fact, fairly traceable to the challenged action, and likely to be redressed by a favorable decision." *Id.* at 6-7 (citing *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560 (1992)). EPA argues "that petitioners have not 'adequately demonstrated' two elements of standing: that their alleged injuries were 'caused by EPA's decision not to regulate emissions of greenhouse gases from mobile sources'; and that their injuries 'can be redressed by a decision in their favor' by this court." *Id.* at 7 (quoting Brief for Respondent at 16). While I respect the majority's thorough and accurate history of the precedents on the standing question, after consulting the same authorities I have come to a different conclusion. I conclude that EPA is correct in its assertion that the petitioners have not demonstrated the element of injury necessary to establish standing under Article III.

I. Injury

As the Supreme Court has stated quite directly and succinctly:

> It is an established principle that to entitle a private individual to invoke the judicial power to determine the validity of executive or legislative action he must show that he has sustained or is immediately in danger of sustaining a direct injury as the result of that action and it is not sufficient that he has merely a general interest common to all members of the public.

Ex Parte Levitt, 302 U.S. 633 (1937) (citing *Tyler v. Judges*, 179 U.S. 405, 406 (1900); *Southern Ry. Co. v. King*, 217 U.S. 524, 534 (1910); *Newman v. Frizzell*, 238 U.S. 537, 549, 550 (1915); *Fairchild v. Hughes*, 258 U.S. 126, 129 (1922); *Massachusetts v. Mellon*, 262 U.S. 447, 488) (1923)).

Thus, the courts "have consistently held that a plaintiff raising only a generally available grievance about government – claiming only harm to his and every citizen's interest in proper application of the Constitution and laws, and seeking relief that no more directly and tangibly benefits him than it does the public at large – does not state an Article III case or controversy." *Lujan*, 504 U.S. at 573. Or, as the Supreme Court has also put it, to establish Article III standing a "plaintiff must have suffered an 'injury in fact'– an invasion of a legally protected interest which is (a) concrete and *particularized* . . . and (b) actual or imminent, not conjectural or hypothetical." *Id.* at 560 (emphasis added; citations and internal quotation marks omitted). Most tellingly, the Supreme Court has specifically declared that "[b]y particularized, we mean that the injury must affect the plaintiff in a personal and individual way." *Id.* at n.1. In the case before us, that is what the petitioners have not established. After plowing through their reams of affidavits and arguments, I am left with the unshaken conviction that they have alleged and shown no harm particularized to themselves. As we have observed in the context of determining standing even in a procedural case, in which the standards are perhaps more relaxed than in other cases, "in order to show that the interest asserted is more than a mere 'general interest . . . common to all members of the public,' the plaintiffs must show that the government act . . . will cause a distinct risk to a particularized interest of the plaintiff." *Florida Audubon Soc'y v. Bentsen*, 94 F.3d 658, 664 (D.C. Cir. 1996).

Petitioners' allegations and affidavits, and petitioners' argument and briefs, are all well made and sincere. Nonetheless, even in the light most favorable to the petitioners, in the end they come down to this: Emission of certain gases that the EPA is not regulating may cause an increase in the temperature of the earth – a phenomenon known as "global warming." This is harmful to humanity at large. Petitioners are or represent segments of humanity at large. This would appear to me to be neither more nor less than the sort of general harm eschewed as insufficient to make out an Article III controversy by the Supreme Court and lower courts.

The courts under Article III stand ready to adjudicate and redress the particularized injuries of plaintiffs, when all other elements of jurisdiction are present. But "when the plaintiff is not himself the object of the government action or inaction he challenges, [although] standing is not precluded, . . . it is ordinarily 'substantially more difficult' to establish." *Lujan*, 504 U.S. at 562 (citations omitted). This time, in my view, it is not only difficult, it is impossible. The generalized public good that petitioners seek is the thing of legislatures and presidents, not of courts. As we stated in another environmental case, to ascertain standing courts must ask the question, did the "underlying governmental act [or inaction] demonstrably increase[] some specific risk of environmental harm to the interest *of the plaintiff*"? *Florida Audubon Soc'y*, 94 F.3d at 667 (emphasis in original). Here, as in *Florida Audubon*, the alleged harm is not particularized, not specific, and in my view, not justiciable.

Therefore, I would reject and dismiss all the petitions before us. This is not to say that petitioners' complaints are wrong. This is not to say they are without redress. This is to say only that the question is not justiciable in its present form with its present champions in the present forum. A case such as this, in

which plaintiffs lack particularized injury is particularly recommended to the Executive Branch and the Congress. Because plaintiffs' claimed injury is common to all members of the public, the decision whether or not to regulate is a policy call requiring a weighing of costs against the likelihood of success, best made by the democratic branches taking into account the interests of the public at large. There are two other branches of government. It is to those other branches that the petitioners should repair.

II. Concurrence in the Judgment

My conclusion leaves a slight problem. No problem exists as to the petitions for review of nonfinal action which Judge Randolph's opinion orders dismissed. I would dismiss those as well, on either his ground or mine. The problem vexes only as to petitions for review in Nos. 03-1361, 03-1362, 03-1363, and 03-1364, which Judge Randolph would deny and Judge Tatel would grant. I would dismiss those as well, as I would hold that we have no jurisdiction to either deny or grant them. How then are we to reach a judgment?

The Supreme Court has suggested a way, or at least Justices of the Supreme Court have. Most recently, in *Hamdi v. Rumsfeld*, 124 S. Ct. 2633 (2004), Justice Souter, joined by Justice Ginsburg, differed from the plurality in a fragmented opinion adjudicating the due process rights of alleged enemy combatants held at Guantanamo Bay by the United States military. Justices Souter and Ginsburg would have vacated the judgment of the Court of Appeals and remanded for proceedings consistent with their view that the government had failed to justify holding the petitioner. However, because that view did not command a majority of the court, and because of "the need to give practical effect to the conclusion of [a majority] of the court rejecting the government's position," Justice Souter

(joined by Justice Ginsburg) joined with the plurality "in ordering a remand on terms closest to those I would impose." 124 S. Ct. at 2660 (Souter, J., concurring). I will take a similar course here.

The majority today holds that we have jurisdiction to render judgment on four of the petitions before us. Although I disagree, I will accept the decision of the majority as dictating the law of this case. Having so accepted the law of the case, I will then join Judge Randolph in the issuance of a judgment closest to that which I myself would issue. With that explanation, I join in the decision to order denying the four petitions from final action of the Environmental Protection Agency.

TATEL, *Circuit Judge*, dissenting in Nos. 03-1361, 03-1362, 03-1363, and 03-1364: Petitioners claim that motor vehicle emissions of greenhouse gases contribute to global warming and that global warming in turn is causing a host of serious problems, likely including increased flash flood potential in the Appalachians, degraded water quality and reduced water supply in the Great Lakes, sea-ice melting and permafrost thawing in Alaska, reduced summer snow-pack runoff in the Rockies, extreme water resource fluctuations in Hawaii, and rising sea levels combined with higher storm surges along the coasts of Puerto Rico, the Virgin Islands, and some eastern states. *See* Pet'rs Br. at 8-10 (summarizing U.S. Dep't of State, *U.S. Climate Action Report 2002*, at 110). Concerned about such problems, petitioners asked EPA to regulate these emissions under Clean Air Act section 202(a)(1), which provides: "The Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from . . . new motor vehicles . . . which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1). EPA denied the petition on two grounds—that it lacked statutory authority to regulate such emissions and that even given such authority it would not exercise it—and petitioners sought review in this court.

My colleagues agree that the petitions for review should not be granted, but they do so for quite different reasons. Judge Sentelle thinks that petitioners lack standing and would dismiss the petitions for that reason. Judge Randolph does not resolve whether petitioners have standing and would deny the petitions based on one of EPA's two given reasons.

I have yet a different view. Unlike Judge Sentelle, I think at least one petitioner has standing, as I explain in Part II. Unlike Judge Randolph, I think EPA's order cannot be sustained on the merits. EPA's first given reason—that it lacks statutory

authority to regulate emissions based on their contribution to welfare-endangering climate change, 68 Fed. Reg. 52,922, 52,925-29 (Sept. 8, 2003)—fails, as I explain in Part III, because the statute clearly gives EPA authority to regulate "*any* air pollutant" that may endanger welfare, 42 U.S.C. § 7521(a)(1), with "air pollutant" defined elsewhere in the statute as "including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air," *id.* § 7602(g). EPA's second given reason—the one accepted by Judge Randolph—is that even if it has statutory authority, it nonetheless "believes" that "it is inappropriate to regulate [greenhouse gas] emissions from motor vehicles" due to various policy reasons. As I explain in Part IV, however, none of these policy reasons relates to the statutory standard—"cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare," *id.* § 7521(a)(1)—and the Clean Air Act gives the Administrator no discretion to withhold regulation for such reasons.

In short, EPA has failed to offer a lawful explanation for its decision. I would accordingly grant the petitions for review and send the matter back to EPA either to make an endangerment finding or to come up with a reasoned basis for refusing to do so in light of the statutory standard.

I.

"Greenhouse gases are accumulating in Earth's atmosphere as a result of human activities, causing surface air temperatures and subsurface ocean temperatures to rise." So begins page one of the National Research Council's 2001 report, *Climate Change Science: An Analysis of Some of the Key Questions* ("NRC Report"), the scientific document EPA "rel[ied]" on in denying the petition for rulemaking, *see* 68 Fed. Reg. at 52,930.

As the NRC Report explains, greenhouse gases (GHGs) trap heat radiated from earth, and their atmospheric concentrations

are increasing "as a result of human activities." NRC Rep. at 1, 9. For example, "[h]uman activities . . . responsible for the increase" in atmospheric concentrations of carbon dioxide (CO_2)—the chief GHG—include "[t]he primary source, fossil fuel burning," as well as "[t]ropical deforestation." *Id.* at 2; *see also id.* at 10, 12. The resulting increases are striking. In the 400,000 years prior to the Industrial Revolution, atmospheric CO_2 concentrations "typically ranged between 190" parts per million by volume (ppmv) "during the ice ages to near 280 ppmv during the warmer 'interglacial' periods." *Id.* at 11. By 1958, atmospheric concentrations were 315 ppmv (12.5% above the pre-Industrial-Revolution high of 280 ppmv), and by 2000 they had risen to 370 ppmv (17% above the 1958 level). *Id.* at 10. Similarly, prior to the Industrial Revolution, atmospheric concentrations of methane (CH_4), another GHG, ranged from .3 ppmv to .7 ppmv; now, "current values are around 1.77 ppmv." *Id.* at 11. Atmospheric concentrations of other GHGs like nitrous oxide (N_2O) have also risen. *Id.* at 2. Notably, GHGs not only disperse throughout the lower atmosphere, but also linger there at length: "Reductions in the atmospheric concentrations of these gases following possible lowered emissions rates in the future will stretch out over decades for methane, and centuries and longer for carbon dioxide and nitrous oxide." *Id.* at 10.

Increased GHG atmospheric concentrations are causing "climate forcings"—"imposed perturbation[s] of Earth's energy balance" measured in terms of units of watts per square meter (W/m^2). *Id.* at 6. Drawing from another report—an Intergovernmental Panel on Climate Change (IPCC) report with which the NRC "generally agrees," *id.* at 1—the NRC Report quantifies these climate forcings. CO_2, "probably the most important climate forcing agent today," has "caus[ed] an increased forcing of about 1.4 W/m^2" between 1750 and 2000. *Id.* at 12, 13. More lies ahead:

> CO_2 climate forcing is likely to become more dominant in the future as fossil fuel use continues. If fossil fuels continue to be used at the current rate, the added CO_2 forcing in 50 years will be about 1 W/m^2. If fossil fuel use increases by 1-1.5% per year for 50 years, the added CO_2 forcing instead will be about 2 W/m^2.

Id. at 12-13. Thus, by 2050, the total CO_2 forcing since 1750 could be from 2.4-3.4 W/m^2. The other GHGs "together cause a climate forcing approximately equal to that of CO_2," or more if one includes certain indirect effects of increased CH_4 emissions. *Id.* at 13. While atmospheric GHG increases are not the only causes of climate forcings—for example, changes in solar irradiance and in concentrations of tropospheric ozone also appear to have caused climate forcings, and atmospheric concentration changes in aerosols like sulphates appear to have caused negative (cooling) climate forcings—all other forcings are less certain and appear less substantial than those caused by GHGs. *See id.*

The extent to which these forcings affect average global temperatures depends on the climate's sensitivity, a condition that is not precisely known. *Id.* at 7. "Well-documented climate changes . . . imply that the climate sensitivity is near . . . 3°C" (5.4°F) for a 4 W/m^2 forcing—a number a bit above the total CO_2 forcing predicted by 2050—"but with a range from 1.5°C to 4.5°C (2.7 to 8.1°F)." *Id.*

Turning to the practical effects of GHG climate forcings, the NRC Report observes that a "diverse array of evidence points to a warming of global surface temperatures." *Id.* at 16. Though the "rate of warming has not been uniform," measurements "indicate that global mean surface air temperature warmed by about .4-.8°C (.7-1.5°F) during the 20th century." *Id.* The report notes that "[t]he Northern Hemisphere as a whole experienced a slight cooling from 1946-75,"—a statement Judge Randolph erroneously reads for the proposition that "*global*

temperatures decreased between 1946 and 1975," op. of Randolph, J., at 12 (emphasis added)—possibly due to the widespread burning of high sulfur coal and resultant sulfate emissions or to changes in ocean circulation in the Atlantic. NRC Rep. at 16. The report also observes that, as the IPCC report points out, the "warming of the Northern Hemisphere during the 20th century is likely to have been the largest of any century in the past thousand years." *Id.*

In evaluating the relationship between GHG atmospheric increases and twentieth-century temperature increases, the NRC Report states that due to the

> large and still uncertain level of natural variability inherent in the climate record and the uncertainties in the time histories of various forcing agents (and particularly aerosols), a causal linkage between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established.

Id. at 17. Although Judge Randolph seizes on this uncertainty—and portrays it as applying to global warming generally rather than to twentieth-century warming, *see* op. of Randolph, J., at 11—read in context, it appears little more than an application of the principle that, as the NRC Report later puts it, "[c]onfidence limits and probabilistic information, with their basis, should always be considered as an integral part of the information that climate scientists provide to policy and decision makers," NRC Rep. at 22. Indeed, the NRC Report goes on to state that the "fact that the magnitude of the observed warming is large compared to natural variability as simulated in climate models is suggestive of such a linkage" between GHG atmospheric concentration increases and twentieth-century temperature increases, though not "proof" of it. *Id.* at 17.

The NRC Report further suggests that uncertainties about

future warming relate chiefly to its scope.

> Climate change simulations for the period of 1990 to 2100 based on IPCC emissions scenarios yield a globally-averaged surface temperature increase by the end of the century of 1.4 to 5.8°C (2.5 to 10.4°F) relative to 1990. The wide range of uncertainty in these estimates reflects both the different assumptions about future concentrations of greenhouse gases and aerosols in the various scenarios considered by the IPCC and the differing climate sensitivities of the various climate models used in the simulations. The range of climate sensitivities implied by these predictions is generally consistent with previously reported values.

Id. at 3. These numbers, of course, are averages: the "predicted warming is higher over higher latitudes than low latitudes, especially during winter and spring, and larger over land than over sea." *Id.*

With this warming will come secondary effects. Predicted impacts in the United States include increased likelihood of drought, greater heat stress in urban areas, rising sea levels, and disruption to many U.S. ecosystems. *Id.* at 19-20. The likelihood and scope of these impacts vary depending on the magnitude of future temperature increases. *See id.*; *see also id.* at 4. Because the "predicted temperature increase is sensitive to assumptions concerning future concentrations of greenhouse gases and aerosols," which in turn depend on future emissions, "national policy decisions made now and in the longer-term future will influence the extent of any damage suffered by vulnerable human populations and ecosystems later in this century." *Id.* at 1.

II.

EPA claims petitioners lack standing to bring this case. To reach the merits, however, we need determine only that one petitioner has standing. *See, e.g., Nuclear Energy Inst., Inc. v. EPA*, 373 F.3d 1251, 1266 (D.C. Cir. 2004). In my view, declarations submitted by petitioners clearly establish that the Commonwealth of Massachusetts has satisfied each element of Article III standing—injury, causation, and redressability, *see, e.g., Lujan v. Defenders of Wildlife*, 504 U.S. 555, 560-61 (1992).

Among other things, Massachusetts claims injury—the "substantial probability that local conditions will be adversely affected," *Sierra Club v. EPA*, 292 F.3d 895, 898 (D.C. Cir. 2002) (internal quotation marks omitted)—resulting from rising sea levels. The declaration of Paul Kirshen, a professor at Tufts University's Civil and Environmental Engineering Department, details how projected rises in sea levels in the metropolitan Boston area would lead both to permanent loss of coastal land and to "more frequent and severe storm surge flooding events along the coast." Kirshen Decl. ¶¶ 7-8; *see also* Jacqz Decl. ¶¶ 8-11. "[I]f sea level rises .3 meters (11.8 inches)—which is near the lower end of the likely range—that would mean the future 10-year flood surge elevation would be at the level of the current 100-year flood elevation and the future 100-year flood surge elevation would be at that of the current 500-year flood elevation." Kirshen Decl. ¶ 10. As other declarations make clear, such changes would lead to serious loss of and damage to Massachusetts's coastal property. *See* Hoogeboom Decl. ¶¶ 6-7; Jacqz Decl. ¶ 11.

Given these declarations, I disagree that no petitioner suffers "harm particularized to" itself. *See* op. of Sentelle, J., at 2. The Commonwealth of Massachusetts claims an injury—namely, loss of land within its sovereign boundaries—that "affects [it] in a personal and individual way,"

Lujan, 504 U.S. at 560 n.1. This loss (along with increased flood damage to the Massachusetts coast) undeniably harms the Commonwealth in a way that it harms no other state. Other states may face their own particular problems stemming from the same global warming—Maine may suffer from loss of Maine coastal land and New Mexico may suffer from reduced water supply—but these problems are different from the injuries Massachusetts faces. Massachusetts's harm is thus a far cry from the kind of generalized harm that the Supreme Court has found inadequate to support Article III standing, i.e., "harm to [its] and every citizen's interest in proper application of the Constitution and laws," or put another way "relief that no more directly and tangibly benefits [it] than it does the public at large," *id.* at 573-74.

As to causation, the declaration of Michael MacCracken, the senior scientist on global change at the Office of the U.S. Global Change Research Program from 1993-2002, states that global warming is causing sea level increases like those in Massachusetts. "[T]he warming of the oceans and the increased melting of many mountain glaciers around the world . . . were the major contributions to the rise in global sea level by 10-20 cm (4 to 8 inches) observed over the past century" and the "environmental impacts of projected global warming will include . . . an increase in sea level at an average rate of about .5 to 3.5 inches per decade, reaching 4-35 inches by the end of the century (with the most likely value being, in my expert opinion, near or above the middle of this range)." MacCracken Decl. ¶ 5(c)-(d); *see also id.* ¶ 23. MacCracken further states that global warming is chiefly triggered by human-caused GHG emissions, *see id.* ¶¶ 5(a)-(b), 12-19, with "the U.S. transportation sector (mainly automobiles) . . . responsible for about 7% of global fossil fuel emissions," *id.* ¶ 31.

Finally, as to redressability, MacCracken emphasizes that "[a]chievable reductions in emissions of CO_2 and other [GHGs]

from U.S. motor vehicles would . . . delay and moderate many of the adverse impacts of global warming." *Id.* ¶5(e). Elaborating, he states that "[g]iven the large emissions of CO_2 and other [GHGs] from motor vehicles in the United States and the lead time needed to economically introduce changes into the motor vehicle fleet, emission reductions must be initiated in the near future in order to significantly reduce and delay the impacts of global warming." *Id.* ¶ 31. Because the extent of damage to the Massachusetts coastline depends on the magnitude of the rise in sea level, a reduction in this projected adverse consequence of global warming would partially redress Massachusetts's injury. *See Tozzi v. U.S. Dep't of Health & Human Servs.*, 271 F.3d 301, 310 (D.C. Cir. 2001) (holding that a petitioner need only demonstrate it would receive "at least some" relief to establish redressability). Nowhere disputing this proposition, EPA instead claims that MacCracken's conclusion depends upon the assumption that other countries will follow the U.S. lead and regulate motor vehicle GHG emissions. Even were this reading of the declaration correct—a dubious premise given MacCracken's unqualified language focusing on U.S. emissions reduction—the uncontested declaration of Michael Walsh, a consultant on motor vehicle pollution technology and at one point director of EPA's motor vehicle pollution control efforts, provides a basis for concluding that other countries would come to mandate technology developed in response to U.S. regulation. Describing how in the past other countries have come to require such technology, Walsh concludes that "[o]n the basis of my experience with the control of other pollutants . . . I have no doubt that establishing emissions standards for pollutants that contribute to global warming would lead to investment in developing improved technologies to reduce those emissions from motor vehicles, and that successful technologies would gradually be mandated by other countries around the world." Walsh Decl. ¶¶ 7-8, 10.

Judge Randolph, accepting that the declarations "do

'support each element' of standing," nonetheless questions whether this is enough. *See* op. of Randolph, J., at 8 (quoting *Sierra Club*, 292 F.3d at 899). Specifically, he believes we confront a question left open in our *Sierra Club* decision. In that case, we held that "[t]he petitioner's burden of production in the court of appeals is . . . the same as that of a plaintiff moving for summary judgment in the district court: it must support each element of its claim to standing 'by affidavit or other evidence.'" 292 F.3d at 899 (quoting *Lujan*, 504 U.S. at 561). But we never explicitly addressed what happens if the agency submits evidence that contradicts that of petitioners. Do we resolve factual disputes in petitioners' favor, return the case to the agency for fact-finding, send the matter to a special master, or pursue some other course of action?

The issue is fascinating, but we need not confront it. Given that the burdens of production here are comparable to those at summary judgment, *see* 292 F.3d at 899, if EPA wants to challenge the facts petitioners have set forth in their affidavits, it has an obligation to respond to the petitioners by "citing any record evidence relevant to . . . standing and, if necessary, appending to its filing additional affidavits or other evidence," *see id.* at 900-01. EPA makes no such challenge.

Indeed, if anything, the order under review appears to support petitioners' standing. While, drawing on the NRC Report, EPA observes that "there continue to be important uncertainties in our understanding of the factors that may affect future climate change," 68 Fed. Reg. at 52,930, EPA never denies the "substantial probability," *see Sierra Club*, 292 F.3d at 898, that injurious global warming is occurring. Quite to the contrary, EPA "agree[s] with the President that 'we must address the issue of global climate change.'" 68 Fed. Reg. at 52,929 (quoting presidential statement of Feb. 14, 2002). As to causation and redressability, the petition denial emphasizes that "EPA is also working to encourage voluntary GHG emission

reductions from the transportation sector" and that "the Administration's global climate change policy includes promoting the development of fuel-efficient motor vehicles and trucks, researching options for producing cleaner fuels, and implementing programs to improve energy efficiency." *Id.* at 52,932; *see also* NRC Rep. at 1 (noting that "national policy decisions made now . . . will influence the extent of any damage" caused by global warming). EPA would presumably not bother with such efforts if it thought emissions reductions would have no discernable impact on future global warming.

Because EPA nowhere challenges petitioners' declarations, I see no reason to consider what we would do if it had done so. Thus, unlike Judge Randolph, I think it unnecessary to address whether we can carve out exceptions to the Supreme Court's seemingly unqualified holding that "a merits question cannot be given priority over an Article III question," *Steel Co. v. Citizens for a Better Env't*, 523 U.S. 83, 97 n.2 (1998). The Commonwealth of Massachusetts has adequately demonstrated its standing, and our jurisdiction is plain.

III.

As to the merits, the threshold question is this: does the Clean Air Act authorize EPA to regulate emissions based on their effects on global climate? Taking a constricted view, EPA insists it has no authority to regulate GHG emissions even if they contribute to substantial and harmful global warming. By contrast, petitioners claim that Congress has plainly given EPA the authority it says it lacks.

"If a court, employing traditional tools of statutory construction, ascertains that Congress had an intention on the precise question at issue, that intention is the law and must be given effect." *Chevron U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 843 n.9 (1984). The inquiry "begin[s], as always, with the plain language of the statute in

question." *Consumer Elecs. Ass'n v. FCC*, 347 F.3d 291, 297 (D.C. Cir. 2003) (quoting *Citizens Coal Council v. Norton*, 330 F.3d 478, 482 (D.C. Cir. 2003)). CAA section 202(a)(1), added by Congress in 1965 and amended in 1970 and 1977, provides,

> The Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare.

42 U.S.C. § 7521(a)(1). This language plainly authorizes regulation of (1) any air pollutants emitted from motor vehicles that (2) in the Administrator's judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. EPA's claimed lack of authority relates to the first of these two elements. According to EPA, GHGs like CO_2, CH_4, N_2O, and hydrofluorocarbons (HFCs) "are not air pollutants." 68 Fed. Reg. at 52,928.

Congress, however, left EPA little discretion in determining what are "air pollutants." Added in 1970 and amended in 1977, CAA section 302(g) defines the term as follows:

> The term 'air pollutant' means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air.

42 U.S.C. § 7602(g). This exceedingly broad language plainly covers GHGs emitted from motor vehicles: they are "physical [and] chemical . . . substance[s] or matter . . . emitted into . . . the ambient air." Indeed, in one CAA provision, added in 1990, Congress explicitly included CO_2 in a partial list of "air pollutants." Section 103(g) instructs the Administrator to research "nonregulatory strategies and technologies for preventing or reducing multiple air pollutants, including sulfur

oxides, nitrogen oxides, heavy metals, PM-10 (particulate matter), carbon monoxide, and *carbon dioxide*." *Id.* § 7403(g) (emphasis added). Faced with such language, a court—as well as an agency—would normally end the analysis here and conclude that GHGs are "air pollutants," since "[w]e 'must presume that a legislature says in a statute what it means and means in a statute what it says . . . . When the words of a statute are unambiguous . . . this first canon is also the last: judicial inquiry is complete.'" *Teva Pharm. Indus. Ltd. v. Crawford*, 410 F.3d 51, 53 (D.C. Cir. 2005) (quoting *Conn. Nat'l Bank v. Germain*, 503 U.S. 249, 253-54 (1992)) (omissions in original).

Unswayed by what it calls "narrow semantic analyses," Resp't Br. at 55—but what courts typically call *Chevron* step one—EPA claims that a "more holistic analysis . . . [of] the text, structure, and history of the CAA as a whole, as well as the context provided by other legislation that is specific to climate change," justifies its conclusion that it cannot regulate GHGs like CO_2 for their effects on climate change, *id.* at 25-26. To disregard the Act's plain text in this way, EPA needs an "extraordinarily convincing justification." *Appalachian Power Co. v. EPA*, 249 F.3d 1032, 1041 (D.C. Cir. 2001). "For the EPA to avoid a literal interpretation at *Chevron* step one, it must show either that, as a matter of historical fact, Congress did not mean what it appears to have said, or that, as a matter of logic and statutory structure, it almost surely could not have meant it." *Engine Mfrs. Ass'n v. EPA*, 88 F.3d 1075, 1089 (D.C. Cir. 1996).

EPA offers four reasons for abandoning the Act's text. First, it suggests that since the 1965, 1970, and 1977 Congresses were not specifically concerned with global warming, the Act cannot apply to GHGs. Second, it claims that for both practical and policy reasons, global pollution should be tackled through specific statutory provisions rather than general ones. Third, relying on *FDA v. Brown & Williamson Tobacco Corp.*, 529

U.S. 120 (2000), it argues that Congress's passage of legislation calling for study of climate change, along with Congress's failure to pass any provisions tailored solely to regulating GHGs, demonstrates that the CAA cannot apply to GHGs. Finally, EPA suggests that Congress couldn't have intended the definition of "air pollutant" to cover CO_2, since EPA regulation of CO_2 emissions from automobiles would overlap with Department of Transportation (DOT) authority over fuel economy standards under a different act. None of these reasons provides a convincing justification—let alone an "extraordinarily convincing" one—for EPA's counter-textual position.

EPA first suggests that because the 1965, 1970, and 1977 Congresses showed little concern about the specific problem of global warming, reading the CAA's language to cover such problems would be like finding "an elephant in a mousehole." Tr. of Oral Arg. at 32; *see also* Resp't Br. at 23 (quoting *Whitman v. Am. Trucking Ass'ns*, 521 U.S. 457, 468 (2002)). EPA is correct that those Congresses spilled little ink on the issue of global warming: while the legislative history contains a few stray references to human-forced climate change, *see, e.g.*, 111 Cong. Rec. 25,061 (Sept. 24, 1965) (statement of Rep. Helstoski); 116 Cong. Rec. 32,914 (Sept. 21, 1970) (report introduced in the record by Sen. Boggs), in those years the scientific understanding of the issue was nascent at best, *see, e.g.*, *Environmental Quality: The First Annual Report of the Council on Environmental Quality* 93 (1970) (noting that "[m]an may be changing his weather" but expressing uncertainty as to whether global warming or cooling was occurring). But EPA errs in suggesting that because Congress may not have precisely foreseen global warming, the Act provides no authorization for GHG regulation. Hardly a mousehole, the definition of "air pollutants"—"including any physical, chemical, biological, radioactive . . . substance or matter which is emitted into or otherwise enters the ambient air"—enables the Act to apply to

new air pollution problems as well as existing ones. "[T]he fact that a statute can be applied in situations not expressly anticipated by Congress," the Supreme Court has explained, "does not demonstrate ambiguity. It demonstrates breadth." *PGA Tour, Inc. v. Martin*, 532 U.S. 661, 689 (2001) (quoting *Pa. Dep't of Corrections v. Yeskey*, 524 U.S. 206, 212 (1998)). Indeed, Congress expressly instructed EPA to be on the lookout for climate-related problems in evaluating risks to "welfare." Section 302(h), added in 1970, explains that "[a]ll language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, *and climate*." 42 U.S.C. § 7602(h) (emphasis added).

EPA's second reason for its interpretation—that for practical and policy reasons global warming should be dealt with through specifically tailored statutes—likewise fails to trump Congress's plain language. It may well be that a statute aimed solely at global warming would deal with the problem more effectively than one aimed generally at air pollution. But an agency may not "avoid the Congressional intent clearly expressed in the [statutory] text simply by asserting that its preferred approach would be better policy." *Engine Mfrs. Ass'n*, 88 F.3d at 1089. Perhaps recognizing this point, EPA attempts to link its policy arguments to the statute by claiming that because the 1977 and 1990 Congresses enacted provisions specific to another global pollution problem—depletion of stratospheric ozone—we must infer that the Act's general provisions do not cover such global problems. Once again, EPA makes much of very little. While the 1977 Congress did add provisions aimed specifically at ozone depletion, it also made clear that "[n]othing in this [ozone-specific] part shall be construed to alter or affect the authority of the Administrator under . . . any other provision of this Act." Pub. L. No. 95-95, § 158, 91 Stat. 685, 730 (1977); *see also* H.R. Rep. No. 95-294, at 102 (1977) (expressing the House Committee's view that

EPA could already regulate emissions to protect stratospheric ozone under an existing general provision of the CAA). Similarly, I see nothing in the 1990 Congress's enactment of other provisions specific to stratospheric ozone protection, *see* 42 U.S.C. §§ 7671 to 7671q, indicating it thought EPA lacked authority under general provisions like section 202 to regulate emissions contributing to global pollution. This is particularly true since that Congress also enacted provisions specific to certain regional pollutants, *see, e.g., id.* §§ 7651 to 7651o (acid rain control), which, pursuant to general CAA provisions, EPA already had authority to regulate.

EPA also attempts an unworkability argument. Its argument goes like this: another part of the CAA provides that the Administrator shall maintain a list of air pollutants that, among other things, "in [the Administrator's] judgment, cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." *Id.* § 7408(a)(1)(A). Once pollutants go on this list, the Administrator must set national ambient air quality standards (NAAQS) for them, i.e., ambient air concentration levels that, in the Administrator's judgment, "are requisite to protect the public health" and in some areas are "requisite to protect the public welfare." *Id.* § 7409(b); *see also id.* §§ 7407, 7410(a)(1). States must submit plans explaining how they will achieve these NAAQS. *Id.* § 7410. According to EPA, these provisions would be unworkable if applied to CO_2: because CO_2 disperses relatively evenly throughout the lower atmosphere, states would have only minimal control over their atmospheric CO_2 concentrations and thus over whether they meet the CO_2 NAAQS. EPA then concludes that because CO_2 regulation would be unworkable in the NAAQS context, no general CAA provisions, including section 202(a)(1), authorize it to regulate any GHGs.

This unwieldy argument fails. Even assuming that states'

limited ability to meet CO_2 NAAQS renders these provisions unworkable as to CO_2, *but see id.* § 7509a(a) (providing a safe harbor for states that fail to meet NAAQS due to emissions emanating from outside the country), the absurd-results canon would justify at most an exception limited to the particular unworkable provision, i.e., the NAAQS provision. *See Mova Pharm. Corp. v. Shalala*, 140 F.3d 1060, 1068 (D.C. Cir. 1998). As EPA acknowledges, regulating CO_2 emissions from automobiles is perfectly feasible. *See* 68 Fed. Reg. at 52,929 (noting that "improving fuel economy" is a "practical way of reducing tailpipe CO_2 emissions" and that other technologies for reducing emissions may develop in the future).

In support of its third justification for abandoning the plain text of sections 202(a)(1) and 302(g), EPA relies on later congressional action (and inaction). Specifically, EPA points out (1) that all direct references to CO_2 or global warming in the 1990 CAA amendments appear in nonregulatory provisions; (2) that other congressional acts such as the 1978 National Climate Program Act, the 1987 Global Climate Protection Act, the 1990 Global Change Research Act, and the 1992 Energy Policy Act, as well as several appropriations riders, touch specifically on the issue of global warming, typically by instructing agencies to study the issue; and (3) that Congress has considered and rejected many bills specifically tailored to GHG emissions regulation since at least 1990. One might well wonder what all this has to do with whether GHGs are "air pollutants" within the meaning of CAA section 302(g). But relying almost exclusively on *Brown & Williamson*, 529 U.S. 120, EPA claims that together these facts indicate that the CAA's general provisions do not cover GHGs. EPA also asserts that, as in *Brown & Williamson*, the "extraordinary" political and economic significance of the regulation requested casts doubt on the agency's authority to undertake it. *See* Resp't Br. at 21-22.

In *Brown & Williamson*, the Court considered whether the

FDA had authority to regulate tobacco products. Although the Food, Drug, and Cosmetic Act's broad language suggested that it did, the Court, acknowledging that "a specific policy embodied in a later federal statute should control our construction of the [earlier] statute, even though it ha[s] not been expressly amended," 529 U.S. at 143 (quoting *United States v. Estate of Romani*, 523 U.S. 517, 530-31 (1998)) (alterations in original), concluded that the FDA lacked such authority. In reaching this conclusion, the Court relied on a direct, irreconcilable conflict between FDA jurisdiction over tobacco under the FDCA and later statutes expressly regulating tobacco. If the FDA had jurisdiction over tobacco products, it would have had to ban them entirely due to their health risks, yet the subsequent acts "reveal[ed Congress's] intent that tobacco products remain on the market." 529 U.S. at 139. Moreover, as the Court emphasized—at least eighteen times by my count—the FDA had repeatedly claimed to have "no authority under the FDCA to regulate tobacco products," *id.* at 157, and "Congress's tobacco-specific statutes ha[d] effectively ratified the FDA's long-held position," *id.* at 144. *See generally id.* at 125-26, 130-31, 144-46, 151-57.

EPA's reliance on *Brown & Williamson* is misplaced. To begin with, I am unconvinced by EPA's contention that its jurisdiction over GHG emissions would be as significant as FDA jurisdiction over tobacco. Acting under the CAA, EPA already extensively regulates the energy and transportation industries, whereas the FDA had no prior authority over the tobacco industry. Moreover, EPA jurisdiction would lead only to *regulation* of GHGs—with, in the case of section 202, regulation taking effect only *after* "such period as the Administrator finds necessary" for development of technology, "giving appropriate consideration to the cost of compliance," 42 U.S.C. § 7521(a)(2). By contrast, FDA jurisdiction over tobacco would have triggered a total product ban. But even assuming the implications are equally significant, this is not an

"extraordinary" case where "common sense," *see Brown & Williamson*, 529 U.S. at 133, 159, calls into question whether Congress has delegated EPA authority to regulate GHGs. Congress gave EPA broad authority to regulate all harmful pollutants, as section 202(a)(1)'s text makes clear. Congress did so intentionally, deeming it "not appropriate to exempt certain pollutants" from the Act's "comprehensive protections." *See* H.R. Rep. No. 95-294, at 42-43. And, as I explain below, no subsequent statutory indicia comparable to those relied on by the Court in *Brown & Williamson* justify a different conclusion.

Perhaps most significantly, no conflict exists between EPA's section 202(a)(1) authority to regulate GHGs and subsequent global warming legislation. Whereas an FDA ban on tobacco would have directly conflicted with congressional intent that tobacco remain on the market, EPA regulation of GHGs would be fully compatible with statutes proposing additional research and other nonregulatory approaches to climate change. Take the three 1990 CAA additions referencing carbon dioxide or global warming. Section 103(g) calls for "nonregulatory strategies and technologies" for reducing pollutants like sulpher oxides, carbon monoxide, and carbon dioxide. 42 U.S.C. § 7403(g). While the section also provides that "[n]othing in this *subsection* shall be construed to authorize the imposition on any person of air pollution control requirements," *id.* (emphasis added), it nowhere suggests that EPA lacks authority to regulate carbon dioxide—or, for that matter, sulpher oxides, carbon monoxide, and other pollutants—under different parts of the Act. Section 602(e) is similar. One sentence requires the Administrator to "publish the global warming potential" of certain listed substances, and the next sentence notes that "[t]he preceding sentence shall not be construed to be the basis of any additional regulation under this chapter." *Id.* § 7671a(e). Once again, nothing in this provision bars regulation under other parts of the Act. The third provision—an uncodified section—merely requires sources

subject to the Act's Title V to "monitor carbon dioxide emissions," and says nothing about regulation one way or the other. Pub. L. No. 101-549, § 821, 104 Stat. 2399, 2699 (1990). Other climate-related acts similarly demonstrating congressional intent that global climate issues receive study and attention are likewise perfectly compatible with GHG regulation. *See generally* National Climate Program Act of 1978, Pub. L. No. 95-367, 92 Stat. 601; Global Climate Protection Act of 1987, Pub. L. No. 100-204, §§ 1101-1106, 101 Stat. 1331, 1407-09; Global Change Research Act of 1990, Pub. L. No. 101-606, 104 Stat. 3096; Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776.

Furthermore, and unlike subsequent tobacco legislation that "effectively ratified the FDA's previous position," *Brown & Williamson*, 529 U.S. at 156, this subsequent global-warming-related legislation passed without any assurance from EPA that the agency lacked authority to regulate GHGs. Quite to the contrary, at the time of the two appropriations riders relied on by EPA, *see, e.g.*, Pub. L. No. 105-276, 112 Stat. 2461, 2496 (1998) (barring use of funds for implementation of the Kyoto Protocol), EPA was taking the position that it possessed general authority to regulate GHG emissions under section 202(a)(1). *See* Memorandum, J. Cannon to C. Browner (April 10, 1998). Finally, the fact that later Congresses failed to pass bills specifically tailored to regulating global warming hardly provides a basis for inferring that earlier Congresses meant to exclude climate-endangering pollutants from the coverage of the CAA's general provisions. Not only is "subsequent legislative history . . . a 'hazardous basis for inferring the intent of an earlier' Congress," but it "is a particularly dangerous ground . . . when it concerns, as it does here . . . proposal[s] that do[] not become law." *Pension Benefit Guar. Corp. v. LTV Corp.*, 496 U.S. 633, 650 (1990) (citation omitted). Indeed, in interpreting the scope of the FDA's authority, the *Brown & Williamson* Court itself expressly declined to rely on failed legislation. 529

U.S. at 155.

EPA has one last argument, applicable to CO_2 emissions alone, for claiming it lacks the authority the language of sections 202(a)(1) and 302(g) expressly bestow upon it. According to EPA, the only practical way to regulate CO_2 emissions from motor vehicles is to require increased fuel economy, since CO_2 is a byproduct of fuel combustion and "[n]o technology currently exists or is under development that can capture and destroy or reduce" CO_2 "emissions from motor vehicle tailpipes." 68 Fed. Reg. at 52,929. Such regulation, EPA reasons, would overlap substantially with DOT's authority under the 1975 Energy Policy and Conservation Act (EPCA) to set average fuel economy standards for certain classes of motor vehicles. *See* Pub. L. No. 94-163, § 502, 89 Stat. 871, 902-07 (1975). Though recognizing that no direct conflict would occur since both agencies would set minimum standards, EPA concludes that "any EPA effort to set CO_2 tailpipe emissions under the CAA would either abrogate EPCA's regime (if the standards were effectively more stringent than the applicable [DOT] standard) or be meaningless (if they were effectively less stringent)." 68 Fed. Reg. at 52,929.

EPA may well be correct that setting standards for fuel economy (rather than for capturing tailpipe emissions) represents its only currently practical option for regulating CO_2 emissions. *But cf.* 42 U.S.C. § 7521(a)(2) (requiring section 202(a)(1) regulation to take effect only "after such period as the Administrator finds necessary to permit the development and application of the requisite technology"). But given that the two regulatory regimes—one targeted at fuel conservation and the other at pollution prevention—are overlapping, not incompatible, there is no reason to assume that Congress exempted CO_2 from the meaning of "air pollutant" within the CAA, particularly since section 103(g) explicitly calls CO_2 an "air pollutant." Where two "statutes are 'capable of co-

existence,' it becomes the *duty* of this court 'to regard each as effective'—at least absent clear congressional intent to the contrary." *FTC v. Ken Roberts Co.*, 276 F.3d 583, 593 (D.C. Cir. 2001) (quoting *Morton v. Mancari*, 417 U.S. 535, 551 (1974)). Moreover, Congress acknowledged, and indeed accepted, the possibility of regulatory overlap. Not only does the current EPCA recognize the relevance of "the effect of other motor vehicle standards of the Government on fuel economy," 49 U.S.C. § 32902(f); *see also* EPCA, Pub. L. No. 94-163, § 502(e), 89 Stat. at 905, but in passing the 1977 CAA amendments Congress emphasized that EPA regulation under the CAA should go forward even where it overlaps with responsibilities given to other agencies under other acts, *see* H.R. Rep. No. 95-294, at 42-43 (explaining that Congress was amending section 302(g) to broaden the meaning of "air pollutants" and make clear that EPA has authority even over pollutants already regulated by another agency). As the 1977 House Report explained, "the Clean Air Act is the comprehensive vehicle for protection of the Nation's health from air pollution. In the committee's view, it is not appropriate to exempt certain pollutants or certain sources from the comprehensive protections afforded by the Clean Air Act." *Id.*

In sum, GHGs plainly fall within the meaning of "air pollutant" in section 302(g) and therefore in section 202(a)(1). If "in [the Administrator's] judgment" they "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7521(a)(1), then EPA has authority—indeed, the obligation—to regulate their emissions from motor vehicles.

IV.

EPA's second reason for refusing to act—what EPA's counsel termed "the fallback argument," Tr. of Oral Arg. at 41—is that even if GHGs are air pollutants, the agency gave

appropriate reasons and acted within its discretion in denying the petition for rulemaking. EPA stresses that our "arbitrary and capricious" standard of review is particularly deferential in reviewing an agency refusal to institute rulemaking. *See* Resp't Br. at 11-12; *cf. Motor Vehicle Mfrs. Ass'n v. EPA*, 768 F.2d 385, 389 n.6 (D.C. Cir. 1985) (observing that the CAA judicial review provisions are identical to those in the APA). This is certainly true, but this court must nonetheless "consider whether the agency's decisionmaking was reasoned," and we will not permit the agency to make "plain errors of law." *See Am. Horse Protection Ass'n, Inc. v. Lyng*, 812 F.2d 1, 5 (D.C. Cir. 1987) (internal quotation marks omitted). Indeed, "the agency has the heaviest of obligations to explain and expose every step of its reasoning," so that we can "exercis[e] our responsibility to determine whether [its] decision is 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'" *See Am. Lung Ass'n v. EPA*, 134 F.3d 388, 392-93 (D.C. Cir. 1998) (quoting 42 U.S.C. § 7607(d)(9)) (reviewing EPA's denial of a petition to revise a NAAQS).

In my view, EPA has failed to satisfy this standard. Indeed, reading the relevant sections of EPA's petition denial—one titled "No Mandatory Duty," another "Different Policy Approach," and a third "Administration Global Climate Change Policy," *see* 68 Fed. Reg. at 52,929, 52,931—I find it difficult even to grasp the basis for EPA's action. In its brief, EPA describes the petition denial as claiming that if the agency thinks regulating GHGs is a bad idea, the Administrator has discretion to withhold making a "judgment," known as an "endangerment finding," that GHG emissions "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare," *see* 42 U.S.C. § 7521(a)(1). Yet the denial itself seems to rest more clearly (albeit still not clearly) on a belief that even if the Administrator makes an endangerment finding, that finding triggers no duty to set emission standards. In the end, though, it makes no difference

whether one or both rationales are genuinely given in the petition denial or whether they instead amount to post hoc rescue attempts. As I explain below, neither rationale is acceptable in light of section 202(a)(1)'s mandate.

EPA's Discretion to Make an Endangerment Finding

In the petition denial, EPA states:

> [T]he CAA provision authorizing regulation of motor vehicle emissions does not impose a mandatory duty on the Administrator to exercise her judgment. Instead, section 202(a)(1) provides the Administrator with discretionary authority to address emissions .... While section 202(a)(1) uses the word 'shall,' it does not require the Administrator to act by a specified deadline and it conditions authority to act on a discretionary exercise of the Administrator's judgment regarding whether motor vehicle emissions cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare.

68 Fed. Reg. at 52,929. Expounding on this passage, EPA argues in its brief that "[t]he ICTA Petition Denial reflects EPA's decision not to make *any* endangerment finding—either affirmative or negative—under section 202(a)(1)." Resp't Br. at 62-63. In EPA's view, "the Agency's authority to make the threshold finding is discretionary" and petitioners err in suggesting that "if the statutory test for making the finding is met, EPA has no choice but to set standards." *Id.* at 57 (internal quotation marks omitted).

EPA's brief also turns several policy concerns raised in other portions of its petition denial into rationales for holding off examining endangerment. These concerns include the following: (1) "there continue to be important uncertainties in our understanding of the factors that may affect future climate change and how it should be addressed"; (2) petitioners

identified no technologies for reducing CH_4, N_2O, and HFC emissions, and technologies for reducing CO_2 emissions either overlap with DOT's authority or require further development; (3) regulation "would also result in an inefficient, piecemeal approach to addressing the climate change issue," as the "U.S. motor vehicle fleet is one of many sources of GHG emissions both here and abroad"; (4) "[u]nilateral EPA regulation of motor vehicle GHG emissions could also weaken U.S. efforts to persuade key developing countries to reduce the GHG intensity of their economies"; and (5) "EPA disagrees with the regulatory approach urged by petitioners," instead preferring "a number of nonregulatory approaches to reducing GHG emissions" in line with "the President's global climate change policy" of "support[ing] vital global climate research and lay[ing] the groundwork for future action by investing in science, technology, and institutions." *See* 68 Fed. Reg. at 52,929-33.

EPA's reasoning is simply wrong. In effect, EPA has transformed the limited discretion given to the Administrator under section 202—the discretion to determine whether or not an air pollutant causes or contributes to pollution which may reasonably be anticipated to endanger public health or welfare—into the discretion to withhold regulation because it thinks such regulation bad policy. But Congress did not give EPA this broader authority, and the agency may not usurp it.

Section 202(a)(1)'s language—the "Administrator shall by regulation prescribe . . . standards applicable to the emission of any air pollutant from . . . new motor vehicles . . . which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7521(a)(1)—establishes the limits of EPA's discretion. This section gives the Administrator the discretion only to "judg[e]," within the bounds of substantial evidence, whether pollutants "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or

welfare." If conflicting credible evidence exists, e.g., some evidence suggesting that GHGs may reasonably be anticipated to endanger welfare and other evidence suggesting the opposite, then the Administrator has discretion in weighing this evidence. If the facts are known but require no single conclusion as to whether a pollutant "may reasonably be anticipated to endanger public health or welfare"—such as in a case where there exists a small-to-moderate risk that a pollutant will cause a small-to-moderate amount of harm—then the Administrator has discretion in assessing whether these facts amount to endangerment. If the Administrator concludes based on substantial evidence that more research is needed before he can judge whether GHGs may reasonably be anticipated to endanger welfare, then he has discretion to hold off making a finding.

But section 202(a)(1) plainly limits the Administrator's discretion—his judgment—to determining whether the statutory standard for endangerment has been met. The Administrator has no discretion either to base that judgment on reasons unrelated to this standard or to withhold judgment for such reasons. In claiming otherwise, EPA not only ignores the statute's language, but also fails to reckon with this circuit's related precedent.

Our en banc decision in *Natural Resources Defense Council, Inc. v. EPA*, 824 F.2d 1146 (D.C. Cir. 1987), makes clear that the Administrator may only exercise "judgment" in evaluating whether the statutory standard has been met. There, considering a CAA provision authorizing the Administrator to set emission standards "at the level which in his judgment provides an ample margin of safety to protect the public health," 42 U.S.C. § 7412(b)(1)(B) (1982) (quoted in 824 F.2d at 1147), we held that the Administrator had to base his determination on what level would "provide an 'ample margin of safety.'" *See* 824 F.2d at 1164-65. We struck down his proposed standards because he failed to ground them in the statute. *See id.* at 1163-64 ("[T]he Administrator has made no finding with respect to

the effect of the chosen level of emissions on health. . . . Nowhere in the decision did the Administrator state that the 1976 emission standards provide an 'ample margin of safety.'").

Similarly, in *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (en banc), we considered whether EPA appropriately linked its policy analysis to the statutory standard. That case involved EPA's decision to regulate leaded gasoline pursuant to CAA section 211(c)(1)(A), 42 U.S.C. § 1857f-6c(1)(A) (1976), *currently codified as amended at* 42 U.S.C. § 7545(c)(1)(A), which at that time provided that the Administrator "may" regulate fuel additives "if any emission products of such . . . fuel additive[s] will endanger the public health or welfare." Determining that lead in gasoline presented "'a significant risk of harm' to the public health," 541 F.2d at 7, EPA regulated it. Industry petitioners objected, claiming that the Administrator needed "proof of actual harm rather than of 'a significant risk of harm.'" *Id.* at 12. Siding with EPA, we held that the agency had discretion in determining what level of harm—or risk of harm—constitutes endangerment. *Id.* We indicated that such determinations involve policy issues, but—as Judge Randolph neglects to mention, *see* op. of Randolph, J., at 13—these policy issues all related to whether the statutory standard had been met, i.e., to whether lead in gasoline endangered public health. *See, e.g.*, 541 F.2d at 24 (observing that "a determination of endangerment to public health is necessarily a question of policy that is to be based on an assessment of risks and that should not be bound by either the procedural or the substantive rigor proper for questions of fact"); *id.* at 26 (noting that "the statute accords the regulator flexibility to assess risks and make essentially legislative policy judgments"). Indeed, *Ethyl* makes quite clear that the Administrator's policy-based discretion is limited to the terms of the statute. "All this is not to say that Congress left the Administrator free to set policy on his own terms. To the contrary, the policy guidelines are largely set, both in the statutory term 'will endanger' and in the relationship of that

term to other sections of the Clean Air Act. These prescriptions direct the Administrator's actions." *Id.* at 29; *cf. Brown & Williamson*, 529 U.S. at 140 (noting that the FDA's "judgment" about how best to achieve public health goals is "no substitute for the specific safety determinations required by the FDCA's various operative provisions").

In yet another case, *Her Majesty the Queen in Right of Ontario v. EPA*, 912 F.2d 1525 (D.C. Cir. 1990), we held that for EPA to decline to make an endangerment finding, it must have a statutorily based reason for doing so. The CAA section at issue provided that when the Administrator had "reason to believe that any air pollutant or pollutants emitted in the United States cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare in a foreign country . . . , the Administrator shall give formal notice thereof to the Governor of the State in which such emissions originate." *Id.* at 1527-28 (quoting 42 U.S.C. § 7415(a) (1982)) (omission in original). Petitioners alleged that the Administrator acted unreasonably in holding off making an endangerment finding as to acid rain, which strong evidence (including informal EPA statements) indicated was coming from the United States and endangering Canadian welfare. *Id.* at 1529. We held that EPA acted reasonably in postponing a formal endangerment finding *only* because it gave a reasonable statutory basis for doing so. Specifically, because EPA still lacked information as to which states were causing the harmful acid rain, it would have been "pointless" for the agency to make an endangerment finding given the "specific [statutory] linkage between the endangerment finding and the remedial procedures," i.e., notifying offending states. *Id.* at 1533. "For this reason," we found EPA's decision to postpone an endangerment finding "both reasonable and consistent with the statute." *Id.*

In short, EPA may withhold an endangerment finding only if it needs more information to determine whether the statutory

standard has been met. Similarly, for EPA to find no endangerment (as Judge Randolph, going beyond the agency's own arguments, appears to claim happened here, *see* op. of Randolph, J., at 13, 15), it must ground that conclusion in the statutory standard and may not rely on unrelated policy considerations.

The statutory standard, moreover, is precautionary. At the time we decided *Ethyl*, section 202(a)(1) and similar CAA provisions either authorized or required the Administrator to act on finding that emissions led to "air pollution *which endangers* the public health or welfare." *See* 42 U.S.C. § 1857f-1(a)(1) (1976) (emphasis added). After Ethyl found that "the statutes and common sense *demand* regulatory action to prevent harm, even if the regulator is less than certain that harm is otherwise inevitable," *Ethyl*, 541 F.2d at 25 (emphasis added), the 1977 Congress not only approved of this conclusion, *see* H.R. Rep. No. 95-294, at 49, but also wrote it into the CAA. Section 202(a)(1) (along with other provisions, *see* H.R. Rep. No. 95-294, at 50) now requires regulation to precede certainty. It requires regulation where, in the Administrator's judgment, emissions "contribute to air pollution *which may reasonably be anticipated to endanger* public health or welfare." 42 U.S.C. § 7521(a)(1) (emphasis added). As the House Report explained: "In order to emphasize the precautionary or preventative purpose of the act (and, therefore, the Administrator's *duty* to assess risks rather than wait for proof of actual harm), the committee not only retained the concept of endangerment to health; the committee also added the words 'may reasonably be anticipated to.'" H.R. Rep. No. 95-294, at 51 (emphasis added).

Given this framework, it is obvious that none of EPA's proffered policy reasons justifies its refusal to find that GHG emissions "contribute to air pollution which may reasonably be anticipated to endanger public health or welfare." Unlike in *Her Majesty the Queen*, EPA's proffered reasons for refusing to

make an endangerment finding have no connection to the statutory standard. Instead, as in *Natural Resources Defense Council* (where we found EPA to have acted arbitrarily and capriciously), EPA has "ventured into a zone of impermissible action" by "simply substitut[ing]" freestanding policy concerns for the sort of evaluation required by the statute. *See* 824 F.2d at 1163. A look at these policy concerns proves the point.

First, EPA claims that global warming still has many scientific uncertainties associated with it. *See* 68 Fed. Reg. at 52,930-31; *see also* op. of Randolph, J., at 11-13. In this regard, EPA makes much of the NRC's statements that a link between human-caused atmospheric GHG concentration increases and this past century's warming "cannot be unequivocally established"; that "a wide range of uncertainty" remains "inherent in current model predictions" due to imprecise variables like future emissions rates, climate sensitivity, and the forcing effects of aerosols; and that "current estimate [sic] of the magnitude of future warming should be regarded as tentative and subject to future adjustments (either upward or downward)." *See* 68 Fed. Reg. at 52,930 (quoting NRC Rep. at 1, 17); *see also* op. of Randolph, J., at 11-13. But the CAA nowhere calls for proof. It nowhere calls for "unequivocal" evidence. Instead, it calls for the Administrator to determine whether GHGs "contribute to air pollution which *may reasonably be anticipated* to endanger" welfare. EPA never suggests that the uncertainties identified by the NRC Report prevent it from determining that GHGs "may reasonably be anticipated to endanger" welfare. In other words, just as EPA failed in *Natural Resources Defense Council* to explain its chosen emissions level in light of the statutory standard, so the agency has failed here to explain its refusal to find endangerment in light of the statutory standard.

EPA's silence on this point is telling. Indeed, looking at the NRC Report as a whole, I doubt EPA could credibly conclude that it needs more research to determine whether GHG-caused

global warming "may reasonably be anticipated to endanger" welfare. Though not offering certainty, the report demonstrates that matters are well within the "frontiers of scientific knowledge," *see* op. of Randolph, J., at 15 (quoting *Envtl. Def. Fund v. EPA*, 598 F.2d 62, 82 (D.C. Cir. 1978)). The report also indicates that the projected consequences of global warming are serious. Because neither EPA nor Judge Randolph acknowledges, let alone evaluates, these projected effects, I quote the NRC's discussion of the "Consequences of Increased Climate Change of Various Magnitudes" in its entirety.

> The U.S. National Assessment of Climate Change Impacts, augmented by a recent NRC report on climate and health, provides a basis for summarizing the potential consequences of climate change. The National Assessment directly addresses the importance of climate change of various magnitudes by considering climate scenarios from two well-regarded models (the Hadley model of the United Kingdom and the Canadian Climate Model). These two models have very different globally-averaged temperature increases (2.7 and 4.4° C (4.9 and 7.9° F), respectively) by the year 2100. A key conclusion from the National Assessment is that U.S. society is likely to be able to adapt to most of the climate change impacts on human systems, but these adaptations may come with substantial cost. The primary conclusions from these reports are summarized for agriculture and forestry, water, human health, and coastal regions.
>
> In the near term, agriculture and forestry are likely to benefit from CO_2 fertilization effects and the increased water efficiency of many plants at higher atmospheric CO_2 concentrations. Many crop distributions will change, thus requiring significant regional adaptations. Given their resource base, the Assessment concludes that such changes will be costlier for small farmers than for large corporate

farms. However, the combination of the geographic and climatic breadth of the United States, possibly augmented by advances in genetics, increases the nation's robustness to climate change. These conclusions depend on the climate scenario, with hotter and drier conditions increasing the potential for declines in both agriculture and forestry. In addition, the response of insects and plant diseases to warming is poorly understood. On the regional scale and in the longer term, there is much more uncertainty.

Increased tendency towards drought, as projected by some models, is an important concern in every region of the United States even though it is unlikely to be realized everywhere in the nation. Decreased snow pack and/or earlier season melting are expected in response to warming because the freeze line will be moving to higher elevations. The western part of the nation is highly dependent on the amount of snow pack and the timing of the runoff. The noted increased rainfall rates have implications for pollution run-off, flood control, and changes to plant and animal habitat. Any significant climate change is likely to result in increased costs because the nation's investment in water supply infrastructure is largely tuned to the current climate.

Health outcomes in response to climate change are the subject of intense debate. Climate change has the potential to influence the frequency and transmission of infectious disease, alter heat- and cold-related mortality and morbidity, and influence air and water quality. Climate change is just one of the factors that influence the frequency and transmission of infectious disease, and hence the assessments view such changes as highly uncertain. This said, changes in agents that transport infectious diseases (e.g., mosquitoes, ticks, rodents) are likely to occur with any significant change in precipitation and temperature.

Increases in mean temperatures are expected to result in new record high temperatures and warm nights and an increase in the number of warm days compared to the present. Cold-related stress is likely to decline whereas heat stress in major urban areas is projected to increase if no adaptation occurs. The National Assessment ties increases in adverse air quality to higher temperatures and other air mass characteristics. However, much of the United States appears to be protected against many different adverse health outcomes related to climate change by a strong public health system, relatively high levels of public awareness, and a high standard of living. Children, the elderly, and the poor are considered to be the most vulnerable to adverse health outcomes. The understanding of the relationships between weather/climate and human health is in its infancy and therefore the health consequences of climate change are poorly understood. The costs, benefits, and availability of resources for adaptation are also uncertain.

Fifty-three percent of the U.S. population lives within the coastal regions, along with billions of dollars in associated infrastructure. Because of this, coastal areas are more vulnerable to increases in severe weather and sea level rise. Changes in storm frequency and intensity are one of the more uncertain elements of future climate change prediction. However, sea level rise increases the potential damage to coastal regions even under conditions of current storm intensities and can endanger coastal ecosystems if human systems or other barriers limit the opportunities for migration.

In contrast to human systems, the U.S. National Assessment makes a strong case that ecosystems are the most vulnerable to the projected rate and magnitude of climate change, in part because the available adaptation

> options are very limited. Significant climate change will cause disruption to many U.S. ecosystems, including wetlands, forests, grasslands, rivers, and lakes. Ecosystems have inherent value, and also supply the country with a wide variety of ecosystem services.
>
> The impacts of these climate changes will be significant, but their nature and intensity will depend strongly on the region and timing of the occurrence. At a national level, the direct economic impacts are likely to be modest. However, on a regional basis the level and extent of both beneficial and harmful impacts will grow. Some economic sectors may be transformed substantially and there may be significant regional transitions associated with shifts in agriculture and forestry. Increasingly, climate change impacts will have to be placed in the context of other stresses associated with land use and a wide variety of pollutants. The possibility of abrupt or unexpected changes could pose greater challenges for adaptation.
>
> Even the mid-range scenarios considered in the IPCC result in temperatures that continue to increase well beyond the end of this century, suggesting that assessments that examine only the next 100 years may well underestimate the magnitude of the eventual impacts. For example a sustained and progressive drying of the land surface, if it occurred, would eventually lead to desertification of regions that are now marginally arable, and any substantial melting or breaking up of the Greenland and Antarctic ice caps could cause widespread coastal inundation.

NRC Rep. at 19-20 (footnotes omitted). I have grave difficulty seeing how EPA, while treating the NRC Report as an "objective and independent assessment of the relevant science," 68 Fed. Reg. at 52,930, could possibly fail to conclude that global warming "may reasonably be anticipated to endanger public health or welfare," 42 U.S.C. § 7521(a)(1), with effects

on welfare including "effects on soil, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being," *id.* § 7602(h). It thus comes as no surprise that EPA's petition denial not only undertakes none of the risk assessments described in *Ethyl*, 541 F.2d at 28 & n.58, but also utterly ignores the statutory standard.

EPA similarly fails to link its second policy justification—that setting fuel economy standards represents the only currently available way to regulate CO_2 emissions and petitioners "make no suggestion[s]" for how to reduce CH_4, N_2O, and HFC emissions, 68 Fed. Reg. at 52,931—with the statutory standard. As discussed earlier, *supra* at 21-22, the fact that DOT sets fuel economy standards pursuant to the EPCA in no way prevents EPA from setting standards pursuant to the CAA. It is true that DOT has recently increased fuel economy standards for light trucks, *see* 68 Fed. Reg. at 52,931; *see also* op. of Randolph, J., at 14—a fact EPA did not even bother to mention in its brief—but unless DOT's action affects whether GHGs "contribute to air pollution which may reasonably be anticipated to endanger public health or welfare," it provides no support for EPA's decision.

As to EPA's point about other GHGs, it may well be that no current technologies exist for reducing their emissions. But once again, this has nothing at all to do with the statutory endangerment standard. Indeed, in section 202(a)(2), Congress has made it crystal clear that endangerment findings must not wait on technology.

> Any regulation prescribed under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of the requisite

> technology, giving appropriate consideration to the cost of compliance within such period.

42 U.S.C. § 7521(a)(2). As the Senate Report explained, EPA "is expected to press for the development and application of improved technology rather than be limited by that which exists." S. Rep. No. 91-1196, at 24 (1970); *see also Natural Res. Def. Council, Inc. v. EPA*, 655 F.2d 318, 328 (D.C. Cir. 1981) (referencing this legislative history). In refusing to make an endangerment finding because it lacks currently available technology for controlling these emissions, EPA goes well beyond the bounds of its statutory discretion.

EPA's final policy reasons likewise fail. Because other domestic and foreign sources contribute to atmospheric GHG concentrations, GHG regulation might well "result in an inefficient, piecemeal approach to addressing the climate change issue," 68 Fed. Reg. at 52,931. But again, Congress has expressly demanded such an approach. Section 202(a)(1) requires EPA to regulate if it judges that U.S. motor vehicle emissions "cause, or *contribute to*, air pollution," 42 U.S.C. § 7521(a)(1) (emphasis added); *see also Ethyl*, 541 F.2d at 29-31 (holding that the same language from section 211 plainly means that emissions merit regulation even if they are not the only source of air pollution). EPA (understandably) offers no basis for thinking that U.S. automobile emissions are not *contributing* to global warming. Indeed, why would the "Administration's global climate change policy plan support[] increasing automobile fuel economy," *see* 68 Fed. Reg. at 52,933, if motor vehicle emissions were contributing nothing to global warming? Similarly, EPA's concern that regulation could weaken U.S. negotiating power with other nations has nothing at all to do with whether GHGs contribute to welfare-endangering air pollution. Finally, while EPA obviously prefers nonregulatory approaches to regulatory ones, *see id.* at 52,932-33, Congress gave the Administrator discretion only in assessing whether

global warming "may reasonably be anticipated to endanger" welfare, not "free[dom] to set policy on his own terms," *Ethyl*, 541 F.2d at 29.

In short, EPA has utterly failed to relate its policy reasons to section 202(a)(1)'s standard. Indeed, nowhere in its policy discussion does EPA so much as mention this standard—"may reasonably be anticipated to endanger public health or welfare." *See* 68 Fed. Reg. at 52,929-33 (the sections titled "Different Policy Approach" and "Administration Global Climate Change Policy"). EPA apparently dislikes the fact that section 202(a)(1) says the Administrator "shall" regulate—rather than "may" regulate—on making an endangerment finding. But EPA cannot duck Congress's express directive by declining to evaluate endangerment on the basis of policy reasons unrelated to the statutory standard. Although EPA is free to take its policy concerns to Congress and seek a change in the Clean Air Act, it must obey the law in the meantime.

EPA's Discretion After Making an Endangerment Finding

Alternatively, EPA may have believed that even if it made an endangerment finding, it had no obligation to regulate GHG emissions. The petition denial states,

> EPA also disagrees with the premise of the petitioners' claim—that if the Administrator were to find that GHGs, in general, may reasonably be anticipated to endanger public health or welfare, she must necessarily regulate GHG emissions from motor vehicles. Depending on the particular problem, motor vehicles may contribute more or less or not at all. An important issue before the Administrator is whether, given motor vehicles' relative contribution to a problem, it makes sense to regulate them. . . . The discretionary nature of the Administrator's section 202(a)(1) authority allows her to consider these important policy issues and decide to regulate motor vehicle

> emissions as appropriate to the air pollution problem being addressed. Accordingly, even were the Administrator to make a formal finding regarding the potential health and welfare effects of GHGs in general, section 202(a)(1) would not require her to regulate GHG emission from motor vehicles.

68 Fed. Reg. at 52,929. This passage is puzzling. Motor vehicles emit GHGs in significant quantities, *see* U.S. Dep't of State, *U.S. Climate Action Report 2002*, at 40—a point EPA nowhere contests. The statute clearly states that the Administrator "*shall* by regulation prescribe . . . standards" governing the emissions of air pollutants from motor vehicles if the Administrator makes an endangerment finding regarding these pollutants. 42 U.S.C. § 7521(a)(1) (emphasis added). *Compare id.* § 7545(c)(1)(A) (using "may"). Refusing to regulate following an endangerment finding would violate the law. Indeed, EPA appears to have abandoned this argument. In a (rare) concession to the Act's text, EPA counsel acknowledged at oral argument, "I don't think that we would contest that if the agency had made an endangerment finding, that then you would have to give some significance to the term 'shall' in [section] 202(a)." Tr. of Oral Arg. at 44.

V.

Although this case comes to us in the context of a highly controversial question—global warming—it actually presents a quite traditional legal issue: has the Environmental Protection Agency complied with the Clean Air Act? For the reasons given above, I believe that EPA has both misinterpreted the scope of its statutory authority and failed to provide a statutorily based justification for refusing to make an endangerment finding. I would thus grant the petitions for review.

[EPA Denial of Rulemaking Petition]

[68 Fed.Reg. 52922 (September 8, 2003)]

ENVIRONMENTAL PROTECTION AGENCY

[FRL -7554-7]

Control of Emissions from New Highway Vehicles and Engines

AGENCY: Environmental Protection Agency (EPA).

ACTION: Notice of denial of petition for rulemaking.

SUMMARY: A group of organizations petitioned EPA to regulate emissions of carbon dioxide and other greenhouse gases from motor vehicles under the Clean Air Act. For the reasons provided below, EPA is denying the petition.

EFFECTIVE DATE: September 8, 2003.

ADDRESSES: Information relevant to this action is contained in Docket No. A-2000-04 at the EPA Docket Center, Public Reading Room, Room B102, EPA West Building, 1301 Constitution Avenue, N.W., Washington, D.C. Dockets may be inspected at this location from 8:30 a.m. to 4:30 p.m., Monday through Friday, except on government holidays. You can reach the Air Docket by telephone at (202) 566-1742 and by facsimile at (202) 566-1741. You may be charged a reasonable fee for photocopying docket materials, as provided in 40 CFR Part 2.

FOR FURTHER INFORMATION CONTACT: Chitra Kumar, Office of Air and Radiation, (202) 564-7413.

SUPPLEMENTAL INFORMATION

I. Background

On October 20, 1999, the International Center for Technology Assessment (ICTA) and a number of other organizations[1] petitioned EPA to regulate certain greenhouse gas

---

[1] Alliance for Sustainable Communities, Applied Power Technologies, Bio Fuels America, California Solar Energy Industries Association, Clements Environmental Corporation, Environmental Advocates, Environmental and Energy Study Institute, Friends of the Earth, Full Circle Energy Project, Green

(GHG) emissions from new motor vehicles and engines under section 202(a)(1) of the Clean Air Act (CAA). Specifically, petitioners seek EPA regulation of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbon (HFCs) emissions from new motor vehicles and engines. Petitioners claim these emissions are significantly contributing to global climate change.

EPA is authorized to regulate air pollutants from motor vehicles under title II of the CAA. In particular, section 202(a)(1) provides that "the Administrator [of EPA] shall by regulation prescribe * * * in accordance with the provisions of [section 202], standards applicable to the emission of any air pollutant from any class or classes of new motor vehicle * * *, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare."

II. Summary of the Petition

Petitioners contend the test for regulating motor vehicle emissions under CAA section 202(a)(1) has been met for CO_2, CH_4, N_2O and HFCs. They claim statements made on EPA's website and in other documents constitute an Agency finding that the four GHGs may reasonably be anticipated to endanger public health or welfare. They also assert that motor vehicle emissions of the GHGs could be significantly reduced by increasing the fuel economy of vehicles, eliminating tailpipe emissions altogether, or using other current and developing technologies. Based on their analysis, they argue that EPA has a mandatory duty under section 202(a)(1) to regulate emissions of GHGs from motor vehicles.

Petitioners present their case for why EPA should, and even must, regulate motor vehicle GHG emissions under section 202(a)(1) in four parts. First, they assert that anthropogenic emissions of CO_2, CH_4, N_2O and HFCs meet the CAA section 302(g) definition of "air pollutant," which is "any air pollution agent or combination of such agents, including any physical,

---

Party of Rhode Island, Greenpeace USA, Network for Environmental and Economic Responsibility of the United Church of Christ, New Jersey Environmental Watch, New Mexico Solar Energy Association, Oregon Environmental Council, Public Citizen, Solar Energy Industries Association, SUN DAY Campaign.

chemical, biological, radioactive * * * substance or matter which is emitted into or otherwise enters ambient air. Such term includes any precursors to the formation of any air pollutant * * * ." Citing international and national reports, petitioners contend that anthropogenic emissions of CO_2, CH_4, N_2O and HFCs are accelerating global warming, and that motor vehicle emissions of these GHGs, particularly CO_2, significantly contribute to the U.S. GHG inventory. Petitioners argue that the contribution of motor vehicle GHG emissions to global climate change qualify them as "air pollutants" under the CAA.

Petitioners also claim that EPA has already determined CO_2 to be an air pollutant. They cite an April 10, 1998 memorandum from Jonathan Z. Cannon, then General Counsel of EPA, to Carol Browner, then Administrator of EPA, entitled "EPA's Authority to Regulate Pollutants Emitted by Electric Power Generation Sources" (hereinafter "Cannon Memorandum"). The memorandum states that sulfur dioxide, nitrogen oxides, mercury, and CO_2 emitted from electric power generating units fall within the definition of "air pollutant" under CAA section 302(g). According to petitioners, it follows from the memorandum that the other three GHGs meet the CAA definition of "air pollutant," too.

Second, petitioners argue that GHG emissions contribute to pollution that "may reasonably be anticipated to endanger public health or welfare," a key criterion for regulation under section 202(a)(1). Petitioners state that the CAA does not require proof of actual harm, but allows the Administrator to make a precautionary decision to regulate an air pollutant if it "may reasonably be anticipated" to endanger public health or welfare. The petitioners point to statements made by the United Nations Intergovernmental Panel on Climate Change (IPCC), EPA and others about the potential effects of global climate change on public health and welfare as establishing that global climate change "may reasonably be anticipated to endanger public health and welfare." Based on these statements, the petitioners allege numerous threats to public health and welfare.

Third, petitioners argue that it is technically feasible to reduce GHG emissions from new motor vehicles and engines. In particular, they note that CO_2 emissions can be reduced by increasing the fuel economy of passenger cars and light trucks, and

that a number of currently available gasoline-powered cars get significantly better fuel economy than the 27.5 mpg corporate average fuel economy (CAFE) standard currently applicable to cars under federal law. They also point to a congressional report identifying other technologies for further improving the fuel economy of gasoline-powered cars that have yet to be fully employed. In addition, petitioners note that several foreign and domestic car manufacturers are already marketing or developing hybrid-electric vehicles that get significantly better fuel mileage than the most fuel-efficient gasoline-powered car. Looking ahead to the next generation of vehicle technology, petitioners describe the potential for electric and hydrogen-celled vehicles to eliminate tailpipe emissions altogether. Petitioners recommend that EPA set a "corporate average fuel-economy based standard" under CAA section 202 that would result in the rapid market introduction of more fuel-efficient and zero-emission vehicles.

Petitioners suggest other potential ways of reducing CO_2 emissions such as setting a declining fleet average NOx emission standard that would require manufacturers to add zero-emission vehicles to their fleets. They also note the availability of tire efficiency standards. Petitioners do not, however, address the potential for reducing motor vehicle emissions of the other three GHGs.

Finally, petitioners maintain that the Administrator has a mandatory duty to regulate motor vehicle GHG emissions under CAA section 202(a)(1). They contend that EPA has "already made formal findings" that motor vehicle GHG emissions "pose[] actual or potential harmful effects [on] the public health and welfare." Noting that section 202(a)(1) provides the Administrator "shall" prescribe motor vehicle standards, petitioners argue that the use of "shall" creates a mandatory duty to promulgate standards when the requisite findings are made. They accordingly claim that the Administrator must establish motor vehicle standards for the four GHGs.

Petitioners further argue that "the precautionary purpose of the CAA supports" regulating these gases even if the Agency believes there is some scientific uncertainty regarding the actual impacts of global climate change. Petitioners cite several court cases recognizing the Administrator's authority to err on the side of caution in making decisions in areas of scientific uncertainty.

They also assert that scientific uncertainty does not excuse a mandatory duty to regulate.

III. Request for Comment

On January 23, 2001, EPA requested public comment on the petition (see 66 FR 7486). The public comment period ended May 23, 2001.

EPA requested comment on all the issues raised in ICTA's petition. In particular, EPA requested comment on any scientific, technical, legal, economic or other aspect of these issues that may be relevant to EPA's consideration of the petition.

IV. Summary of Public Comments

EPA received almost 50,000 comments on the petition. Most comments were relatively brief expressions of support for the petition sent by electronic mail; many were virtually identical. EPA also heard from a number of business and environmental groups. Most of the comments focused exclusively on CO_2. This section describes the significant points and arguments made in the public comments.

Several commenters addressed the issue of whether the four GHGs–CO_2, CH_4, N_2O and HFCs–are "air pollutants" under the CAA and thus potentially subject to regulation under the Act. Some of the commenters agreed with the petitioners that GHGs are air pollutants under the CAA. Like the petitioners, they noted that the definition of "air pollutant" in CAA section 302(g) is very broad and that the CAA itself refers to CO_2 as an "air pollutant" (see CAA section 103(g)). These commenters also cited to and agreed with the Cannon Memorandum and statements by Gary Guzy, EPA's General Counsel following Mr. Cannon, that CO_2 falls within the CAA definition of air pollutant.

Other commenters argued that EPA has never formally determined that any GHGs are air pollutants and that the Cannon Memorandum is not such a finding. Some commenters also argued that CO_2 is not an air pollutant because it is a naturally-occurring substance in Earth's atmosphere and is critical to sustaining life. Other commenters pointed out that EPA already regulates as air pollutants substances that have natural as well as anthropogenic sources where human activities have increased the quantities present in the air to levels harmful to public health, welfare or the

environment (e.g., sulfur dioxide, volatile organic compounds, particulate matter).

Another issue of concern to commenters was whether EPA has authority to regulate motor vehicle emissions of GHGs even if they meet the CAA definition of "air pollutant." Commenters supportive of the petition noted the broad authority conferred by section 202(a)(1) to regulate motor vehicle emissions that cause or contribute to air pollution that may reasonably be anticipated to endanger public health and welfare. These commenters also noted that CAA section 302(h) defines "welfare" to include effects on weather and climate, as well as other aspects of the environment that may be affected by global climate change (e.g., soils, water, crops, vegetation, animals, visibility).

Other commenters argued that the CAA does not authorize regulations to address global climate change, including motor vehicle GHG emission standards. They noted that no CAA provision specifically authorizes global climate change regulations, a Senate committee's proposal for mandatory CO_2 standards for motor vehicles did not survive Senate consideration, and other contemporaneous legislative proposals for mandatory GHG emission reductions failed to pass. They also pointed out that the only CAA provision that specifically mentions CO_2 authorizes only "nonregulatory" measures and expressly precludes its use as authority for imposing mandatory controls. They cited another CAA provision that calls on EPA to determine the "global warming potential" of certain pollutants but expressly precludes regulation on that basis as further indication that Congress did not intend EPA to regulate GHGs under the CAA.

Looking at the CAA more broadly, several commenters argued that the key statutory mechanism for controlling pervasive "air pollutants" – establishing and implementing national ambient air quality standards under sections 108, 109 and 110 – is unworkable for addressing an issue whose causes and effects are global in nature. Several commenters also pointed out that Congress addressed another global atmospheric issue, depletion of stratospheric ozone by man-made substances, explicitly and in discrete portions of the Act, specifically part B of title I prior to the CAA Amendments of 1990 and title VI following the 1990 amendments. Moreover, both incarnations of CAA stratospheric

ozone authority included recognition of the international nature of the problem and provisions to facilitate and augment international cooperation in achieving a solution. These commenters argued that if Congress had intended EPA to address global climate change under the CAA, it would have made that clear by including analogous provisions.

Placing the CAA in a larger context, the commenters noted several other federal statutes that specifically address global climate change and authorize only research and policy development, not regulation. Commenters also pointed out that Congress has expressed dissatisfaction with the Kyoto Protocol, negotiated under the auspices of the United Nations Framework Convention on Climate Change and requiring parties to the Protocol to reduce their GHG emissions by a specific amount. They further cited congressional actions taken since the 1990 CAA amendments to prevent EPA from implementing the Kyoto Protocol (the so-called Knollenberg amendments to the FY 1999 and 2000 VA-HUD and Independent Agency Appropriations Acts). Finally, they noted that Congress had rejected numerous legislative proposals mandating GHG reductions (see, e.g., S. 1224, 101st Cong. (1989); H.R. 5966, 101st Cong. (1990)). According to the commenters, these actions clearly signal that Congress awaits further scientific information and other technological and international developments before authorizing any regulation to address global climate change.

Finally, several commenters pointed to the Supreme Court's decision in *Food and Drug Administration v. Brown & Williamson Tobacco Corp.*, 120 S.Ct. 1291 (2000), finding that the FDA lacks authority to regulate tobacco products despite a facially broad grant of authority. These commenters warned that a reviewing court would closely scrutinize and likely strike down an EPA assertion of CAA authority to regulate for global climate change purposes when Congress specifically addressed the issue of global climate change, not in the CAA, but in other federal statutes that do not authorize regulation.

On the other hand, several commenters pointed to, and agreed with, a letter from then EPA General Counsel Guzy to a congressional committee explaining that explicit mention of a pollutant is not a necessary prerequisite to regulation under a statutory provision granting broad authority to regulate

pollutants, provided that the statutory criteria for regulation are met. These commenters also echoed Mr. Guzy's view that a congressional decision not to require standards does not affect pre-existing discretionary authority to set standards where the applicable criteria are met.

Many commenters considered the issue of whether anthropogenic GHG emissions contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. Several commenters pointed out, as petitioners did, that EPA's climate website and other national and international reports describe hazards to human health and welfare that may result from global climate change. Other commenters claimed that there is no basis at this time for EPA to conclude that GHG emissions from U.S. motor vehicles endanger public health or welfare. Some commenters questioned whether global warming was occurring or whether humans' impact on any global warming was significant. These commenters also suggested that global warming, if real, would have beneficial impacts (e.g., helping prevent another ice age, increasing agricultural production) that could outweigh any adverse effects. Several commenters argued that since the causes and effects of global climate change occur on a worldwide basis, regulation of only U.S. motor vehicles would be neither effective nor fair.

Commenters also addressed whether it is technologically feasible to reduce GHG emissions from new motor vehicles. Some commenters described categories of technologies that can substantially reduce CO_2 emissions from gasoline-powered passenger cars and light trucks, including vehicle load reduction, engine improvements, improved transmissions, integrated starter generators, and hybrid-electric drivetrains. Vehicle load reduction strategies include reduced vehicle mass, reduced aerodynamic drag, reduced tire rolling resistance, and reduced accessory loads. Engine improvement strategies include improved specific power and gasoline direct injection. Improved transmission strategies include 5- and 6-speed automatic transmissions, 5speed motorized manual gearshifts, and continuously variable transmissions. Other commenters asserted that EPA may not regulate motor vehicle GHG emissions by setting fuel economy standards inasmuch as Congress entrusted fuel economy standard-setting to the Department of Transportation (DOT) under the Energy Policy

and Conservation Act (EPCA).

Finally, commenters considered whether EPA has a mandatory duty to regulate motor vehicle GHG emissions. Some commenters agreed with petitioners that the Cannon Memorandum and EPA's website statements triggered an obligation under CAA section 202(a)(1) to set CO_2 standards. Other commenters countered that the Cannon Memorandum and EPA website statements are not formal EPA findings for the purposes of exercising statutory authority. They asserted that for findings to provide a sufficient legal basis for regulating under section 202(a)(1), they must be established through a public notice-and-comment process.

V. EPA Response

After careful consideration of petitioners' arguments and the public comments, EPA concludes that it cannot and should not regulate GHG emissions from U.S. motor vehicles under the CAA. Based on a thorough review of the CAA, its legislative history, other congressional action and Supreme Court precedent, EPA believes that the CAA does not authorize regulation[2] to address global climate change. Moreover, even if CO_2 were an air pollutant generally subject to regulation under the CAA, Congress has not authorized the Agency to regulate CO_2 emissions from motor vehicles to the extent such standards would effectively regulate car and light truck fuel economy, which is governed by a comprehensive statute administered by DOT.

In any event, EPA believes that setting GHG emission standards for motor vehicles is not appropriate at this time. President Bush has established a comprehensive global climate change policy designed to (1) answer questions about the causes, extent, timing and effects of global climate change that are critical to the formulation of an effective, efficient long-term policy, (2) encourage the development of advanced technologies that will enable dramatic reductions in GHG emissions, if needed, in the future, and (3) take sensible steps in the interim to reduce the risk

---

[2] "Regulation" as used in this section of the notice refers to legally binding requirements promulgated by an agency under statutory authority. It does not include voluntary measures that emission sources may or may not undertake at their discretion.

of global climate change. The international nature of global climate change also has implications for foreign policy, which the President directs. In view of EPA's lack of CAA regulatory authority to address global climate change, DOT's authority to regulate fuel economy, the President's policy, and the potential foreign policy implications, EPA declines the petitioners' request to regulate GHG emissions from motor vehicles.

A. EPA's Legal Authority under the CAA

As summarized above, many commenters on the petition raised important legal issues regarding EPA's authority to issue global climate change regulations under the CAA. Two EPA General Counsels previously addressed the issue of EPA's authority to impose CO_2 emission control requirements. Both found that CO_2 meets the CAA definition of "air pollutant" and could therefore be subject to regulation under one or more of the CAA's regulatory provisions if the applicable statutory criteria for regulation were met. Both also noted, however, that the Agency had not made the requisite findings under any CAA provision for regulation of CO_2 emissions. Significantly, the past general counsels reached their conclusions prior to the Supreme Court's decision in *Brown & Williamson,* which cautions agencies against using broadly worded statutory authority to regulate in areas raising unusually significant economic and political issues when Congress has specifically addressed those areas in other statutes.

Because the petition seeks CAA regulation of GHG emissions from motor vehicles to reduce the risk of global climate change, EPA has examined the fundamental issue of whether the CAA authorizes the imposition of control requirements for that purpose. As part of that examination, EPA's General Counsel, Robert E. Fabricant, reviewed his predecessors' memorandum and statements, as well as the public comments raising legal authority issues. The General Counsel considered the text and history of the CAA in the context of other congressional actions specifically addressing global climate change and in light of the Supreme Court's admonition in *Brown & Williamson* to "be guided to a degree by common sense as to the manner in which Congress is likely to delegate a policy decision of such * * * magnitude to an administrative agency." In a memorandum to the Acting Administrator dated August 29, 2003, the General Counsel

concluded that the CAA does not authorize EPA to regulate for global climate change purposes, and accordingly that CO_2 and other GHGs cannot be considered "air pollutants" subject to the CAA's regulatory provisions for any contribution they may make to global climate change. Accordingly, he withdrew the Cannon memorandum and statements by Mr. Guzy as no longer expressing the views of EPA's General Counsel. The General Counsel's opinion is adopted as the position of the Agency for purposes of deciding this petition and for all other relevant purposes under the CAA.

As summarized above, commenters supporting the petition claim that section 202 of the CAA provides EPA with broad authority to set standards for motor vehicle emissions of CO_2 and other GHGs to the extent those emissions cause or contribute to global climate change. At the same time, other commenters correctly note that (1) no CAA provision specifically authorizes global climate change regulation, (2) the only CAA provision specifically mentioning CO_2 authorizes only "nonregulatory" measures, (3) the codified CAA provisions related to global climate change expressly preclude the use of those provisions to authorize regulation, (4) a Senate committee proposal to include motor vehicle CO_2 standards in the 1990 CAA amendments failed, (5) federal statutes expressly addressing global climate change do not authorize regulation, and (6) numerous congressional actions suggest that Congress has yet to decide that such regulation is warranted. These indicia of congressional intent raise the issue of whether the CAA is properly interpreted to authorize regulation to address global climate change.

Congress was well aware of the global climate change issue when it last comprehensively amended the CAA in 1990. During the 1980s, scientific discussions about the possibility of global climate change led to public concern both in the U.S. and abroad. In response, the U.S. and other nations developed the United Nations Framework Convention on Climate Change (UNFCCC). President George H. W. Bush signed, and the U.S. Senate approved, the UNFCCC in 1992, and the UNFCCC took effect in 1994.

The UNFCCC established the "ultimate objective" of "stabiliz[ing] greenhouse gas concentrations in the atmosphere at

a level that would prevent dangerous anthropogenic interference with the climate system" (Article 2 of the UNFCCC). All parties to the UNFCCC agreed on the need for further research to determine the level at which GHG concentrations should be stabilized, acknowledging that "there are many uncertainties in predictions of climate change, particularly with regard to the timing, magnitude and regional patterns thereof" (findings section of UNFCCC).

Shortly before the UNFCCC was adopted in May 1992, Congress developed the 1990 CAA amendments. A central issue for the UNFCCC – whether binding emission limitations should be set – was also considered in the context of the CAA amendments. As several commenters noted, a Senate committee included in its bill to amend the CAA a provision requiring EPA to set CO_2 emission standards for motor vehicles. However, that provision was removed from the bill on which the full Senate voted, and the bill eventually enacted was silent with regard to motor vehicle CO_2 emission standards. During this same time period, other legislative proposals were made to control GHG emissions, some in the context of national energy policy, but none were passed (see, e.g., S. 324, 101st Cong. (1989); S. 1224, 101st Cong. (1989); H.R. 5966, 101st Cong. (1990)).

In the CAA Amendments of 1990 as enacted, Congress called on EPA to develop information concerning global climate change and "nonregulatory" strategies for reducing CO_2 emissions. Specifically, uncodified section 821 of the CAA Amendments requires measurement of CO_2 emissions from utilities subject to permitting under title V of the CAA. New section 602 of the CAA directs EPA to determine the "global warming potential" of substances that deplete stratospheric ozone. And new section 103(g) calls on EPA to develop "nonregulatory" measures for the prevention of multiple air pollutants and lists several air pollutants and CO_2 for that purpose.

Notably, none of these provisions authorizes the imposition of mandatory requirements, and two of them expressly preclude their use for regulatory purposes (sections 103(g) and 602). Only the research and development provision of the CAA – section 103 – specifically mentions CO_2, and the legislative history of that section indicates that Congress was focused on seeking a sound scientific basis on which to make

future decisions on global climate change, not regulation under the CAA as it was being amended. Representatives Roe and Smith, two of the principal authors of section 103 as amended, explained that EPA's "science mandate" needed updating to deal with new, more complex issues, including "global warming" (A Legislative History of the Clean Air Act Amendments of 1990, 103 Cong., 1st Sess., S. Prt. 103-38, Vol. 2, pp. 2776 and 2778). They expressed concern that EPA's research budget had been too heavily focused on supporting existing regulatory actions when the Agency also needed to conduct long-term research to "enhance EPA's ability to predict the need for future action" (*id.* at 2777).

In providing EPA with expanded research and development authority, however, Congress did not provide commensurate regulatory authority. In section 103(g), Congress directed EPA to establish a "basic engineering research and technology program to develop, evaluate and demonstrate" strategies and technologies for air pollution prevention and specifically called for improvements in such measures for preventing CO_2 as well as several specified air pollutants. But it expressly provided that nothing in the subsection "shall be construed to authorize the imposition on any person of air pollution control requirements." As if to drive home the point, section 103(g) was revised in conference to include the term "nonregulatory" to describe the "strategies and technologies" the subsection was intended to promote. In its treatment of the global climate change issue in the CAA amendments, Congress made clear that it awaited further information before making decisions on the need for regulation.

Beyond Congress' specific CAA references to CO_2 and global warming, another aspect of the Act cautions against construing its provisions to authorize regulation of emissions that may contribute to global climate change. The CAA provisions addressing stratospheric ozone depletion demonstrate that Congress has understood the need for specially tailored solutions to global atmospheric issues, and has expressly granted regulatory authority when it has concluded that controls may be needed as part of those solutions. Like global climate change, the causes and effects of stratospheric ozone depletion are global in nature. Anthropogenic substances that deplete stratospheric ozone are emitted around the world and are very long-lived; their depleting

effects and the consequences of those effects occur on a global scale. In the CAA prior to its amendment in 1990, Congress specifically addressed the problem in a separate portion of the statute (part B of title I) that recognized the global nature of the problem and called for negotiation of international agreements to ensure world-wide participation in research and any control of stratospheric ozone-depleting substances. In the 1990 CAA amendments, Congress again addressed the issue in a discrete portion of the statute (title VI) that similarly provides for coordination with the international community. Moreover, both incarnations of the CAA's stratospheric ozone provisions contain express authorization for EPA to regulate as scientific information warrants. In light of this CAA treatment of stratospheric ozone depletion, it would be anomalous to conclude that Congress intended EPA to address global climate change under the CAA's general regulatory provisions, with no provision recognizing the international dimension of the issue and any solution, and no express authorization to regulate.

EPA's prior use of the CAA's general regulatory provisions provides an important context. Since the inception of the Act, EPA has used these provisions to address air pollution problems that occur primarily at ground level or near the surface of the earth. For example, national ambient air quality standards (NAAQS) established under CAA section 109 address concentrations of substances in the ambient air and the related public health and welfare problems. This has meant setting NAAQS for concentrations of ozone, carbon monoxide, particulate matter and other substances in the air near the surface of the earth, not higher in the atmosphere. Concentrations of these substances generally vary from place to place as a result of differences in local or regional emissions and other factors (e.g., topography), although long range transport may also contribute to local concentrations in some cases. CO_2, by contrast, is fairly consistent in concentration throughout the *world's* atmosphere up to approximately the lower stratosphere. Problems associated with atmospheric concentrations of CO_2 are much more like the kind of global problem Congress addressed through adoption of the specific provisions of Title VI.

In assessing the availability of CAA authority to address global climate change, it is also useful to consider whether the

NAAQS system – a key CAA regulatory mechanism – could be used to effectively address the issue. Unique and basic aspects of the presence of key GHGs in the atmosphere make the NAAQS system fundamentally ill-suited to addressing these gases in relation to global climate change. Many GHGs reside in the earth's atmosphere for very long periods of time. CO_2, by far the most pervasive of anthropogenic GHGs, has a residence time of roughly 50-200 years. This long lifetime along with atmospheric dynamics means that CO_2 is well mixed throughout the atmosphere, up to approximately the lower stratosphere. The result is a vast global atmospheric pool of CO_2 that is fairly consistent in concentration, everywhere along the surface of the earth and vertically throughout this area of mixing.

While atmospheric concentrations of CO_2 are fairly consistent globally, the potential for either adverse or beneficial effects in the U.S. from these concentrations depends on complicated interactions of many variables on the land, in the oceans, and in the atmosphere, occurring around the world and over long periods of time. Characterization and assessment of such effects and the relation of such effects to atmospheric concentration of CO_2 in the U.S. would present scientific issues of unprecedented complexity in the NAAQS context. The long-lived nature of the CO_2 global pool would also make it extremely difficult to evaluate the extent over time to which effects in the U.S. would be related to anthropogenic emissions in the U.S. Finally, the nature of the global pool would mean that any CO_2 standard that might be established would in effect be a worldwide ambient air quality standard, not a national standard – the entire world would be either in compliance or out of compliance.

Such a situation would be inconsistent with a basic underlying premise of the CAA regime for implementation of a NAAQS – that actions taken by individual states and by EPA can generally bring all areas of the U.S. into attainment of a NAAQS. The statutory NAAQS implementation regime is fundamentally inadequate when it comes to a substance like CO_2, which is emitted globally and has relatively homogenous concentrations around the world. A NAAQS for CO_2, unlike any pollutant for which a NAAQS has been established, could not be attained by any area of the U.S. until such a standard were attained by the entire world as a result of emission controls implemented in

countries around the world. The limited flexibility provided in the Act to address the impacts of foreign pollution transported to the U.S. was not designed to address the challenges presented by long-lived global atmospheric pools such as exists for CO_2. The globally-pervasive nature of CO_2 emissions and atmospheric concentrations presents a unique problem that fundamentally differs from the kind of environmental problem that the NAAQS system was intended to address and is capable of solving.

Other congressional actions confirm that Congress did not authorize regulation under the CAA to address global climate change. Starting in 1978, Congress passed several pieces of legislation specifically addressing global climate change. With the National Climate Program Act of 1978, 15 U.S.C. 2901 et seq., Congress established a "national climate program" to improve understanding of "climate processes, natural and man induced, and the social, economic, and political implications of global climate change" through research, data collection, assessments, information dissemination, and international cooperation. In the Global Climate Protection Act of 1987, 22 U.S.C. 2651 note, Congress directed the Secretary of State to coordinate U.S. negotiations concerning global climate change, and EPA to develop and propose to Congress a coordinated national policy on the issue. Three years later, Congress passed the Global Change Research Act of 1990, 15 U.S.C. 2931 et seq., establishing a Committee on Earth and Environmental Sciences to coordinate a 10-year research program. That statute was enacted one day after the CAA Amendments of 1990 was signed into law. Also in 1990, Congress passed Title XXIV of the Food and Agriculture Act, creating a Global Climate Change Program to research global climate agricultural issues (section 2401 of Pub.L. No.101-624).

With these statutes, Congress sought to develop a foundation for considering whether future legislative action on global climate change was warranted and, if so, what that action should be. From federal agencies, it sought recommendations for national policy and further advances in scientific understanding and possible technological responses. It did not authorize any federal agency to take any regulatory action in response to those recommendations and advances. In fact, Congress declined to adopt other legislative proposals, contemporaneous with the bills to amend the CAA in 1989 and 1990, to require GHG emissions

reductions from stationary and mobile sources (see, e.g., S. 1224, 101st Cong. (1989); H.R. 5966, 101st Cong. (1990)). While Congress did not expressly preclude agencies from taking regulatory action under other statutes, its actions strongly indicate that when Congress was amending the CAA in 1990, it was awaiting further information before deciding *itself* whether regulation to address global climate change is warranted and, if so, what form it should take.

Since 1990, Congress has taken other actions consistent with the view that Congress did not authorize CAA regulation for global climate change purposes. In the 1992 Energy Policy Act, Congress called on the Secretary of Energy to assess various GHG control options and report back to Congress, and to establish a registry for reporting *voluntary* GHG emissions. Following ratification of the UNFCCC, nations party to the Convention negotiated the Kyoto Protocol calling for mandatory reductions in developed nations' GHG emissions. While the Kyoto Protocol was being negotiated, the Senate in 1997 adopted by a 95-0 vote the Byrd-Hagel Resolution, which stated that the U.S. should not be a signatory to any protocol that would result in serious harm to the economy of the U.S. or that would mandate new commitments to limit or reduce U.S. GHG emissions unless the Protocol also mandated new, specific, scheduled commitments to limit or reduce GHG emissions for developing countries within the same compliance period. Although the Clinton Administration signed the Kyoto Protocol, it did not submit it to the Senate for ratification out of concern that the Senate would reject the treaty. Congress also attached language to appropriations bills that barred EPA from implementing the Kyoto Protocol without Senate ratification (see, e.g., Knollenberg amendments to the FY 1999 and 2000 VA-HUD and Independent Agencies Appropriations Acts). Since enactment of the 1990 CAA amendments, numerous bills to control GHG emissions from mobile and stationary sources have failed to win passage (see, e.g., H.R. 2993, 102d Cong., 1st Sess. 137 Cong. *Rec.* H4611 (daily ed. 1991)).

Against this backdrop of consistent congressional action to learn more about the global climate change issue before specifically authorizing regulation to address it, the CAA cannot be interpreted to authorize such regulation in the absence of any direct or even indirect indication of congressional intent to provide

such authority. EPA is urged on in this view by the Supreme Court's decision in *Brown & Williamson*, which struck down FDA's assertion of authority to regulate tobacco products under the Food, Drug and Cosmetic Act (FDCA). That statute contains a broadly worded grant of authority for FDA to regulate "drugs" and "devices," terms which the statute also broadly defines. However, the FDCA does not specifically address tobacco products while other federal laws expressly govern the marketing of those products.

Notwithstanding the FDCA's facially broad grant of authority, the Supreme Court explained that "[i]n extraordinary cases, * * * there may be reason to hesitate before concluding that Congress has intended such an implicit delegation." The Court noted that FDA was "assert[ing] jurisdiction to regulate an industry constituting a significant portion of the American economy," despite the fact that "tobacco has its own unique political history" that had led Congress to create a distinct regulatory scheme for tobacco products. The Court concluded that FDA's assertion of authority to regulate tobacco was "hardly an ordinary case." The Court analyzed FDA's authority in light of the language, structure and history of the FDCA and other federal legislation and congressional action specifically addressing tobacco regulation, including failed legislative attempts to confer authority of the type FDA was asserting. Based on that analysis, it determined that Congress did not "intend[] to delegate a decision of such economic and political significance * * * in so cryptic a fashion."

It is hard to imagine any issue in the environmental area having greater "economic and political significance" than regulation of activities that might lead to global climate change. Virtually every sector of the U.S. economy is either directly or indirectly a source of GHG emissions, and the countries of the world are involved in scientific, technical, and political-level discussions about climate change. We believe, in fact, that an effort to impose controls on U.S. GHG emissions would have far greater economic and political implications than FDA's attempt to regulate tobacco.

The most abundant anthropogenic GHG, CO_2, is emitted whenever fossil fuels such as coal, oil, and natural gas are used to produce energy. The production and use of fossil fuel-based

energy undergirds almost every aspect of the U.S. economy. For example, approximately 70 percent of the electric energy used in this country is generated from fossil fuel, and the U.S. transportation sector is almost entirely dependent on oil.

Proposals to reduce CO_2 emissions from these sectors have focused on four major approaches: (1) improve fuel efficiency; (2) capture and sequester CO_2; (3) switch to alternative non-fossil fuel sources; and (4) reduce vehicle usage by switching to alternative forms of transportation. Congress has already addressed the first approach in other statutes – not the CAA – by giving other Departments and agencies – not EPA – regulatory authority to deal with fuel and energy efficiency. For example, Congress has authorized DOT to set fuel economy standards for motor vehicles and the Department of Energy to set efficiency standards for products such as air conditioners and appliances that consume electricity.

The other approaches for reducing CO_2 emissions all have substantial economic implications. While it may eventually be possible to achieve widespread capture and sequester CO_2 emissions from power plants, such an approach would require a new generation of power plants and would be very costly, even if implemented over many years. As for the use of alternative fuels, governments and private companies around the world are investing billions of dollars to explore the possibility of using non-fossil fuels for power generation and transportation. Any widespread effort to switch away from fossil fuels in either sector would likewise require a wholesale transformation of our methods for producing power and transporting goods and people. As for alternative modes of transportation, Congress and many states have already adopted measures to encourage public transportation, car pooling, bike usage, and land-use planning designed to minimize commuting distances. EPA supports these measures and believes that they provide many environmental benefits. However, widespread substitution of alternative forms of transportation for transportation based on fossil fuel energy would also require a wholesale remaking of this sector. It is hard to overstate the economic significance of making these kinds of fundamental and widespread changes in basic methods of producing and using energy.

The issue of global climate change also has enormous

political significance. It has been discussed extensively during the last three Presidential campaigns; it is the subject of debate and negotiation in several international bodies; and numerous bills have been introduced in Congress over the last 15 years to address the issue.

In light of Congress' attention to the issue of global climate change, and the absence of any direct or even indirect indication that Congress intended to authorize regulation under the CAA to address global climate change, it is unreasonable to conclude that the CAA provides the Agency with such authority. An administrative agency properly awaits congressional direction before addressing a fundamental policy issue such as global climate change, instead of searching for authority in an existing statute that was not designed or enacted to deal with the issue. We thus conclude that the CAA does not authorize regulation to address concerns about global climate change.

It follows from this conclusion, that GHGs, as such, are not air pollutants under the CAA's regulatory provisions, including sections 108, 109, 111, 112 and 202. CAA authorization to regulate is generally based on a finding that an air pollutant causes or contributes to air pollution that may reasonably be anticipated to endanger public health or welfare. CAA section 302(g) defines "air pollutant" as "any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive * * * substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant[.]" The root of the definition indicates that for a substance to be an "air pollutant," it must be an "agent" of "air pollution." Because EPA lacks CAA regulatory authority to address global climate change, the term "air pollution" as used in the regulatory provisions cannot be interpreted to encompass global climate change. Thus, CO_2 and other GHGs are not "agents" of air pollution and do not satisfy the CAA section 302(g) definition of "air pollutant" for purposes of those provisions. We reserve judgment on whether GHGs would meet the CAA definition of "air pollutant" for regulatory purposes were they subject to regulation under the

CAA for global climate change purposes.[3]

B. Interference with Fuel Economy Standards

Even if GHGs were air pollutants generally subject to regulation under the CAA, Congress has not authorized the Agency to regulate CO_2 emissions from motor vehicles to the extent such standards would effectively regulate the fuel economy of passenger cars and light duty trucks. No technology currently exists or is under development that can capture and destroy or reduce emissions of CO_2, unlike other emissions from motor vehicle tailpipes. At present, the only practical way to reduce tailpipe emissions of CO_2 is to improve fuel economy. Congress has already created a detailed set of mandatory standards governing the fuel economy of cars and light duty trucks, and has authorized DOT – not EPA – to implement those standards. The only way for EPA to proceed with CO_2 emissions standards without upsetting this statutory scheme would be to set a standard less stringent than CAFE for cars and light duty trucks. But such an approach would be meaningless in terms of reducing GHG emissions from the U.S. motor vehicle fleet.[4] Congress' care in designing the CAFE program makes clear that EPCA is the only statutory vehicle for regulating the fuel economy of cars and light duty trucks. Under EPCA, DOT may set only "corporate average" standards that automakers meet on a fleetwide basis. Automakers thus have flexibility to design different vehicle models having different fuel economy so long as the average of the

---

[3] As General Counsel Fabricant notes in his memorandum, a substance does not meet the CAA definition of "air pollutant" simply because it is a "physical, chemical, biological, radioactive * * * substance or matter which is emitted into or otherwise enters the ambient air." It must also be an "air pollution agent."

[4] Although the ICTA petition focuses on passenger cars and light duty trucks, it seeks regulation of GHG emissions generally from motor vehicles and engines, which include heavy duty engines and trucks. Passenger cars and light duty trucks are subject to CAFE standards; heavy duty trucks are not. The contribution of heavy duty trucks to the U.S. motor vehicle GHG inventory is relatively small, about 16 percent. EPA believes it would be ineffective, inefficient and unreasonable to set CO_2 emission standards for these vehicles in the absence of a more comprehensive program for seeking CO_2 and other GHG reductions from the many types of sources of these emissions.

vehicles sold by the automaker in a given model year and class meets the CAFE standard for that year. In fact, EPCA offers automakers additional flexibility by allowing them to meet the CAFE standard for a given model year by "carrying back" or "carrying forward" the excess fuel economy performance of their fleets for the three years before or after the applicable model year.

EPCA also builds in an opportunity for congressional oversight of CAFE standard-setting that reinforces the notion that Congress intended fuel economy to be governed by EPCA alone. The statute specifies a CAFE standard of 27.5 miles per gallon for passenger cars in model years 1984 and beyond (49 U.S.C. section 32902(b)), but authorizes DOT to amend the standard to the "maximum feasible average fuel economy level" for the relevant model year. However, to the extent DOT raises or lowers the standards beyond specified levels, EPCA provides an automatic opportunity for Congress to disapprove and effectively void the amended standard (49 U.S.C. section 32902(c)). Given that the only practical way of reducing tailpipe CO_2 emissions is by improving fuel economy, any EPA effort to set CO_2 tailpipe standards under the CAA would either abrogate EPCA's regime (if the standards were effectively more stringent than the applicable CAFE standard) or be meaningless (if they were effectively less stringent).

C. No Mandatory Duty

As explained above, in light of the language, history, structure and context of the CAA and Congress' decision to give DOT authority to regulate fuel economy under EPCA, it is clear that EPA does not have authority to regulate motor vehicle emissions of CO_2 and other GHGs under the CAA. In any event, the CAA provision authorizing regulation of motor vehicle emissions does not impose a mandatory duty on the Administrator to exercise her judgment. Instead, section 202(a)(1) provides the Administrator with discretionary authority to address emissions in addition to those addressed by other section 202 provisions (see, e.g., sections 202(a)(3) and (b)). While section 202(a)(1) uses the word "shall," it does not require the Administrator to act by a specified deadline and it conditions authority to act on a discretionary exercise of the Administrator's judgment regarding whether motor vehicle emissions cause or contribute to air pollution that may reasonably be anticipated to

endanger public health or welfare.

The Web site statements, legal memorandum and other documents cited by petitioners and commenters in support of the petition are not sufficient to satisfy the criteria for setting standards under section 202(a)(1). Exercise of section 202(a)(1) authority turns on the judgment made by the *Administrator*, and CAA section 301 does not permit the Administrator to delegate her standard-setting authority under section 202(a)(1). None of the statements petitioners claim constitute the requisite endangerment finding for GHGs under section 202(a)(1) were made, or subsequently adopted, by the Administrator. As the Cannon memorandum stated in 1998, no Administrator had made a finding under any of the CAA's regulatory provisions that CO_2 meets the applicable statutory criteria for regulation. (Notably, the website statements on which the petitioners partly rely were in existence at the time Mr. Cannon issued his memorandum.) That statement remains true today–no Administrator has made any finding that satisfies the criteria for setting CO_2 standards for motor vehicles or any other emission source. In any event, for such findings to suffice for standard-setting purposes, they must be established through a notice-and-comment process.

EPA also disagrees with the premise of the petitioners' claim–that if the Administrator were to find that GHGs, in general, may reasonably be anticipated to endanger public health or welfare, she must necessarily regulate GHG emissions from motor vehicles. Depending on the particular problem, motor vehicles may contribute more or less or not at all. An important issue before the Administrator is whether, given motor vehicles' relative contribution to a problem, it makes sense to regulate them. In the case of some types of air pollution, motor vehicles may be one of many contributors, and it may make sense to control other contributors instead of, or in tandem with, motor vehicles. The discretionary nature of the Administrator's section 202(a)(1) authority allows her to consider these important policy issues and decide to regulate motor vehicle emissions as appropriate to the air pollution problem being addressed. Accordingly, even were the Administrator to make a formal finding regarding the potential health and welfare effects of GHGs in general, section 202(a)(1) would not require her to regulate GHG emissions from motor vehicles.

D. Different Policy Approach

Beyond issues of authority and interference with fuel economy standards, EPA disagrees with the regulatory approach urged by petitioners. We agree with the President that "we must address the issue of global climate change" (Feb. 14, 2002). We do not believe, however, that it would be either effective or appropriate for EPA to establish GHG standards for motor vehicles at this time. As described in detail below, the President has laid out a comprehensive approach to climate change that calls for near-term voluntary actions and incentives along with programs aimed at reducing scientific uncertainties and encouraging technological development so that the government may effectively and efficiently address the climate change issue over the long term.

Petitioners cited numerous studies and other sources of information in contending that anthropogenic emissions of CO_2, CH_4, N_2O, and HFCs are accelerating global climate change and that emission of these compounds from motor vehicles contribute to the problem. Numerous commenters agreed with petitioners and a few cited additional information or studies as further support. See "Summary of Climate Petition Comments on Science" in the docket for this action. Other commenters disagreed with petitioners' contentions, citing different data and studies or in some cases interpreting the same data and studies differently or emphasizing different aspects of the information provided. *Id.* We reviewed the information submitted by petitioners and commenters and concluded that all of the information was widely available and in the public domain at the time we solicited comments on the petition. The information submitted does not add significantly to the body of information available to the National Research Council (NRC) when it prepared its 2001 report, *Climate Change Science: An Analysis of Some Key Questions*. We rely in this decision on NRC's objective and independent assessment of the relevant science. The comments submitted to the record do not include information that causes us to question the validity of the NRC's conclusions.

As the NRC noted in its report, concentrations of GHGs are increasing in the atmosphere as a result of human activities (pp. 9-12). It also noted that "[a] diverse array of evidence points to a warming of global surface air temperatures" (p. 16). The

report goes on to state, however, that "[b]ecause of the large and still uncertain level of natural variability inherent in the climate record and the uncertainties in the time histories of the various forcing agents (and particularly aerosols), a casual linkage between the buildup of greenhouse gases in the atmosphere and the observed climate changes during the 20th century cannot be unequivocally established. The fact that the magnitude of the observed warming is large in comparison to natural variability as simulated in climate models is suggestive of such a linkage, but it does not constitute proof of one because the model simulations could be deficient in natural variability on the decadal to century time scale" (p. 17).

The NRC also observed that "there is considerable uncertainty in current understanding of how the climate system varies naturally and reacts to emissions of [GHGs] and aerosols" (p.1). As a result of that uncertainty, the NRC cautioned that "current estimate of the magnitude of future warming should be regarded as tentative and subject to future adjustments (either upward or downward)." *Id.* It further advised that "[r]educing the wide range of uncertainty inherent in current model predictions of global climate change will require major advances in understanding and modeling of both 1) the factors that determine atmospheric concentrations of [GHGs] and aerosols and 2) the so-called 'feedbacks' that determine the sensitivity of the climate system to a prescribed increase in [GHGs]." *Id.*

The science of climate change is extraordinarily complex and still evolving. Although there have been substantial advances in climate change science, there continue to be important uncertainties in our understanding of the factors that may affect future climate change and how it should be addressed. As the NRC explained, predicting future climate change necessarily involves a complex web of economic and physical factors including: our ability to predict future global anthropogenic emissions of GHGs and aerosols; the fate of these emissions once they enter the atmosphere (e.g., what percentage are absorbed by vegetation or are taken up by the oceans); the impact of those emissions that remain in the atmosphere on the radiative properties of the atmosphere; changes in critically important climate feedbacks (e.g., changes in cloud cover and ocean circulation); changes in temperature characteristics (e.g., average

temperatures, shifts in daytime and evening temperatures); changes in other climatic parameters (e.g., shifts in precipitation, storms); and ultimately the impact of such changes on human health and welfare (e.g., increases or decreases in agricultural productivity, human health impacts). The NRC noted, in particular, that "[t]he understanding of the relationships between weather/climate and human health is in its infancy and therefore the health consequences of climate change are poorly understood" (p. 20). Substantial scientific uncertainties limit our ability to assess each of these factors and to separate out those changes resulting from natural variability from those that are directly the result of increases in anthropogenic GHGs.

Reducing the wide range of uncertainty inherent in current model predictions will require major advances in understanding and modeling of the factors that determine atmospheric concentrations of greenhouse gases and aerosols, and the processes that determine the sensitivity of the climate system. Specifically, this will involve reducing uncertainty regarding:

- The future global use of fossil fuels and future global emissions of methane,
- The fraction of fossil fuel carbon that will remain in the atmosphere and contribute to radiative forcing versus exchange with the oceans or with the land biosphere,
- The impacts (either positive or negative) of climate change on regional and local systems,
- The nature and causes of the natural variability of climate and its interactions with human-induced changes, and
- The direct and indirect effects of the changing distribution of aerosols.

Knowledge of the climate system and of projections about the future climate is derived from fundamental physics, chemistry and observations. Data are then incorporated in global circulation models. However, model projections are limited by the paucity of data available to evaluate the ability of coupled models to simulate important aspects of climate. The U.S. and other countries are attempting to overcome these limitations by developing a more

comprehensive long-term observation system, by making more extensive regional measurements of greenhouse gases, and by increasing the computing power required to handle these expanded data sets.

A central component of the President's policy is to reduce key uncertainties that exist in our understanding of global climate change. Important efforts are underway to address these uncertainties. In particular, the federal government has expanded scientific research efforts through its Climate Change Research Initiative (CCRI). President Bush announced this new initiative in June 2001 and called for it "to study areas of uncertainty and identify priority areas where investments can make a difference." The CCRI recently issued its final "Strategic Plan for the Climate Change Research Program" to ensure that scientific efforts are focused where they are most critical and that the key scientific uncertainties identified are addressed in a timely and effective manner for decision makers.

The President has also stated, however, that "while scientific uncertainties remain, we can begin now to address the factors that contribute to climate change" (June 11, 2001). Thus, along with stepped-up efforts to reduce scientific uncertainties, the President's policy calls for public-private partnerships to develop break-through technologies that could dramatically reduce the economy's reliance on fossil fuels without slowing its growth. Large-scale shifts away from traditional energy sources, however, will require not only the development of abundant, cost-effective alternative fuels, but potentially wholesale changes in the way industrial processes and consumer products use fuel. Such momentous shifts do not take place quickly. As the President has explained, "[a]ddressing global climate change will require a sustained effort, over many generations" (*www.whitehouse.gov/news/releases/2002/02/climatechange.html*).

By contrast, establishing GHG emission standards for U.S. motor vehicles at this time would require EPA to make scientific and technical judgments without the benefit of the studies being developed to reduce uncertainties and advance technologies. It would also result in an inefficient, piecemeal approach to addressing the climate change issue. The U.S. motor vehicle fleet is one of many sources of GHG emissions both here and abroad, and different GHG emission sources face different

technological and financial challenges in reducing emissions. A sensible regulatory scheme would require that all significant sources and sinks of GHG emissions be considered in deciding how best to achieve any needed emission reductions.

Unilateral EPA regulation of motor vehicle GHG emissions could also weaken U.S. efforts to persuade key developing countries to reduce the GHG intensity of their economies. Considering the large populations and growing economies of some developing countries, increases in their GHG emissions could quickly overwhelm the effects of GHG reduction measures in developed countries. Any potential benefit of EPA regulation could be lost to the extent other nations decided to let their emissions significantly increase in view of U.S. emission reductions.[5] Unavoidably, climate change raises important foreign policy issues, and it is the President's prerogative to address them.

In light of the considerations discussed above, EPA would decline the petitioners' request to regulate motor vehicle GHG emissions even if it had authority to promulgate such regulations. Until more is understood about the causes, extent and significance of climate change and the potential options for addressing it, EPA believes it is inappropriate to regulate GHG emissions from motor vehicles.

In any event, the President's policy includes efforts to reduce motor vehicle petroleum consumption through increases in motor vehicle fuel economy. As noted previously, petitioners specifically suggested that EPA set a "corporate average fuel economy-based standard," but only DOT is authorized to set motor vehicle fuel economy standards. DOT considered increasing fuel economy standards and recently promulgated a final rule increasing the CAFE standards for light trucks, including sports

---

[5] The U.S. faced a similar dilemma in its efforts to address stratospheric ozone depletion. Early U.S. controls on substances that deplete stratospheric ozone were not matched by many other countries. Over time, U.S. emission reductions were more than offset by emission increases in other countries. The U.S. did not impose additional domestic controls on stratospheric ozone-depleting substances until key developed and developing nations had committed to controlling their own emissions under the Montreal Protocol on Substances that Deplete Stratospheric Ozone.

utility vehicles, by 1.5 miles per gallon over a three-year period beginning with model year 2005. The new standards are projected to result in savings of approximately 3.6 billion gallons of gasoline over the lifetime of the affected vehicles, with the corresponding avoidance of 31 million metric tons of carbon dioxide emissions. For the longer term, the President has established a new public-private partnership with the nation's automobile manufacturers to promote the development of hydrogen as a primary fuel for cars and trucks, with the goal of building a commercially viable zero-emissions hydrogen-powered vehicle. In the near-term, the President has sought $3 billion in tax credits over 11 years for consumers to purchase fuel cell and hybrid vehicles.

Aside from fuel economy-based standards, petitioners only other suggestions for reducing CO_2 from motor vehicles are tire efficiency standards and a declining fleet-averaged NOx standard to force the introduction of zero-emitting vehicles. In the case of tire efficiency standards, it is questionable whether such standards would qualify as "standards applicable to the *emission*" of an air pollutant from a motor vehicle under section 202(a)(1), since such standards would presumably apply to the vehicle's tires, not its CO_2 emissions (emphasis added). As for zero emission vehicles, further technological developments are needed before they could be a practical choice for most consumers.

With respect to the other GHGs – CH_4, N20, and HFCs – petitioners make no suggestion as to how those emissions might be reduced from motor vehicles. GHG emissions from motor vehicles primarily consist of CO_2 from fuel combustion. In 1999, N20 represented 4 percent, HFCs 1 percent, and CH_4 less than 1 percent of transportation GHG emissions. As byproducts of combustion, there is a direct proportional relationship between CO_2 emissions and fuel economy levels. EPA believes parameters other than fuel economy are more relevant to N_2O and HFC formation. HFCs come from mobile air conditioners, while N_2O is influenced by catalytic converter design. CH_4 is a byproduct of combustion, like CO_2, but can also be affect by catalytic converter design. As noted above, N20, HFCs, and CH_4 represent a very small percentage of total U.S. transportation GHG emissions. As such, they would not be an effective or efficient target for regulation in the absence of regulation of CO_2 emissions.

VI. Administration Global Climate Change Policy

Lack of CAA authority to impose GHG control requirements does not leave the federal government powerless to take sensible measured steps to address the global climate change issue. As described in this notice, the President has laid out a comprehensive approach to global climate change that calls for near-term voluntary actions and incentives along with programs aimed at reducing scientific uncertainties and encouraging technological development so that the government may effectively and efficiently address the global climate change issue over the long term. The CAA and other federal statutes provide the federal government with ample authority to conduct the research necessary to better understand the nature, extent and effects of any human-induced global climate change and to develop technologies that will help achieve GHG emission reductions to the extent they prove necessary. The CAA and other statutes also authorize, and EPA and other agencies have established, nonregulatory programs that provide effective and appropriate means of addressing global climate change while scientific uncertainties are addressed.

As part of that effort, the President in February 2002 called for voluntary reductions in GHG intensity, including through fuel economy improvements. GHG intensity is the ratio of GHG emissions to economic output. The President's goal is to lower the U.S. rate of emissions from an estimated 183 metric tons per million dollars of gross domestic product (GDP) in 2002 to 151 metric tons per million dollars of GDP in 2012. Meeting this commitment will prevent GHG emissions of over 500 million metric tons of carbon equivalent (MMTCE) from entering the atmosphere cumulatively over the next ten years, and is equivalent to taking 70 million (or one out of three) cars off the road.

The "Climate VISION" (Voluntary Innovative Sector Initiatives: Opportunities Now) program, a Presidential initiative launched by the Department of Energy (DOE) in February 2003, is a voluntary public-private partnership designed to pursue cost-effective strategies to reduce the growth of GHG emissions, especially by energy-intensive industries. Working with trade associations and other groups, the program assists industry in its efforts to accelerate the transition to energy technologies and manufacturing processes that are cleaner, more efficient, and

capable of capturing or sequestering GHGs. Climate VISION links these objectives with technology development and deployment activities primarily at DOE, but also at other participating agencies. Since Climate VISION was launched, 14 industry groups have become program partners with DOE.

EPA is also pursuing a number of nonregulatory approaches to reducing GHG emissions. In February 2002, EPA launched EPA's Climate Leaders program, a new voluntary partnership program between government and industry. Through Climate Leaders, companies will work with EPA to evaluate their GHG emissions, set aggressive reduction goals, and report their progress toward meeting those goals. To date, more than 40 companies from almost all of the most energy-intensive industry sectors have joined Climate Leaders.

EPA's Energy Star program is another example of voluntary actions that have substantially reduced GHG emissions. Energy Star is a voluntary labeling program that provides critical information to businesses and consumers about the energy efficiency of the products they purchase. Over the past decade more than 750 million Energy Star products have been purchased across more than 30 product categories (e.g., computers, microwaves, washing machines). Reductions in GHG emissions from Energy Star purchases were equivalent to removing 10 million cars from the road last year. Businesses and consumers not only reduced their GHG emissions, but also saved $5 billion last year through their use of Energy Star products.

EPA is also working to encourage voluntary GHG emission reductions from the transportation sector. The key elements of this effort are the SmartWay Transport Partnership and the Best Workplaces for Commuters program. The SmartWay Transport Partnership works with the trucking and railroad industry to develop and deploy more fuel-efficient technologies and practices to achieve substantial fuel savings and emission reductions. The goal of Best Workplaces for Commuters is to offer innovative solutions to commuting challenges faced by U.S. employers and employees by promoting outstanding commuter benefits that reduce vehicle trips and miles traveled. EPA estimates that these voluntary programs have the potential to reduce GHG emissions by 9 MMTCE annually by 2010.

EPA has voluntary programs aimed specifically at reducing methane emissions from a variety of sources. For example, the Agency has partnerships with natural gas companies to reduce emissions from leaky pipelines and distribution equipment, solid waste landfill facilities to capture and reuse emissions from landfills, and coal mining companies to capture and reuse methane escaping from mines. Together, these programs are projected to reduce methane emissions to below 1990 levels through 2010.

In addition, EPA has extensive partnerships with industries responsible for emissions of the most potent industrial GHG (e.g., sulfur hexafluoride, per fluorocarbons and HFCs). Through partnerships with EPA, the aluminum sector has exceeded their goal of reducing PFC emissions by 45% from 1990 levels by 2000 and is now in discussions about a new, more aggressive goal. The semiconductor manufacturing sector has agreed to reduce their emissions by 10% below 1995 levels by 2010. This year, a new agreement was reached with the magnesium sector under which they have agreed to completely phase-out their SF6 emissions by 2010.

The federal government's voluntary climate programs are already achieving significant emission reductions. In 2000 alone, reductions in GHG emissions totaled 66 MMTCE when compared to emissions in the absence of these programs.

Importantly, the President's initiative will improve our ability to accurately measure and verify GHG emissions through an enhanced national GHG registry system. The U.S. will improve the voluntary registry's accuracy, reliability, and verifiability, taking into account emerging domestic and international approaches. Organizations participating in the new registry will be provided with transferable credits for achieving voluntary emissions reductions. These credits will be available for use under any future incentive-based or mandatory programs. We believe the enhanced standards for the new registry will strengthen the current voluntary trading systems.

The President's 2003 budget also seeks $4.5 billion for global climate change-related programs, a $700 million increase over 2002. This includes $1.7 billion for science research under the Climate Change Research Initiative, and $1.3 billion for

climate change technologies under the National Climate Change Technology initiative. This commitment is unmatched in the world. The 2003 budget seeks $555 million in clean energy incentives to spur investments in solar, wind, and biomass energy, co-generation, and landfill gas conversion.

New and expanded international policies will complement our domestic policies, including tripled funding for the "Debt-for-Nature" Tropical Forest Conservation Program, fully funding the Global Environment Facility for its third four-year replenishment, enhanced support for climate observation systems and climate technology assistance in developing countries, and sustained level funding for USAID climate programs, including technology transfer and capacity building in developing countries.

In the transportation sector, the Administration's global climate change plan includes promoting the development of fuel-efficient motor vehicles and trucks, researching options for producing cleaner fuels, and implementing programs to improve energy efficiency. The plan calls for expanding federal research partnerships with industry, providing market-based incentives, and updating current regulatory programs that advance our progress in this area. This commitment includes expanding fuel cell research, in particular through the "FreedomCAR" initiative.

FreedomCAR is a new public-private partnership with the nation's automobile manufacturers. It seeks to promote the development of hydrogen as a primary fuel for cars and trucks, with the goal of building a commercially viable zero-emissions hydrogen-powered vehicle. FreedomCAR focuses on technologies to enable mass production of affordable hydrogen-powered fuel cell vehicles and the hydrogen-supply infrastructure to support them. Developing new technologies to improve the energy efficiency of transportation in the U.S. will be a key element in achieving future reductions in GHG emissions. The President's 2003 budget seeks more than $3 billion in tax credits over 11 years for consumers to purchase fuel cell and hybrid vehicles. The Administration's global climate change plan supports increasing automobile fuel economy and encouraging new technologies that reduce our dependence on imported oil, while protecting passenger safety and jobs.

EPA will play an important role in efforts to develop

advanced motor vehicle technologies that improve fuel economy and reduce emissions. The Agency's Clean Automotive Technology (CAT) program is working to develop advanced clean and fuel-efficient automotive technology. Under the program, EPA's goal is to develop technology by the end of the decade that will satisfy stringent emissions requirements and achieve up to a doubling of fuel efficiency in personal vehicles such as SUVs, pickups, and urban delivery vehicles – while simultaneously meeting the more demanding size, performance, durability, and power requirements of these vehicles. EPA will also play a leadership role in advancing fuel cell vehicle and hydrogen fuel technologies and influencing the direction of technological and policy progress in support of U.S. environmental, energy, and national security goals.

To address GHG emissions from the electric utility sector, DOE in February of this year announced FutureGen, a $1 billion government/industry partnership to design, build and operate a nearly emission-free, coal-fired electric and hydrogen production plant. The 275-megawatt prototype plant will serve as a large scale engineering laboratory for testing new clean power, carbon capture, and coal-to-hydrogen technologies. It will be the cleanest fossil fuel-fired power plant in the world. The project is a direct response to the President's Climate Change and Hydrogen Fuels Initiatives.

In all, the President's global climate change policy sets the U.S. on a path to slow the growth of GHG emissions and, as the science justifies, to stop and then reverse that growth. This policy supports vital global climate change research and lays the groundwork for future action by investing in science, technology, and institutions. In addition, the President's policy emphasizes international cooperation and promotes working with other nations to develop an efficient and coordinated response to global climate change. In taking prudent environmental action at home and abroad, the U.S. is advancing a realistic and effective long-term approach to the global climate change issue.

VII. Conclusion

For the reasons discussed above, and after considering the ICTA petition, public comment, EPA's legal authority, and other relevant information, EPA hereby denies the ICTA petition

requesting that EPA regulate certain GHG emissions from new motor vehicles and engines under CAA section 202(a)(1).

Dated: August 28, 2003

/signed/ Jeffrey R. Holmstead

Assistant Administrator for Air and Radiation

United States Court of Appeals

FOR THE DISTRICT OF COLUMBIA CIRCUIT

Filed December 2, 2005

No. 03-1361

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
PETITIONERS

v.

ENVIRONMENTAL PROTECTION AGENCY,
RESPONDENT

ALLIANCE OF AUTOMOBILE MANUFACTURERS, ET AL.,
INTERVENORS

Consolidated with
03-1362, 03-1363, 03-1364, 03-1365, 03-1366, 03-1367,
03-1368,

On Petition for Rehearing En Banc

Before: GINSBURG, *Chief Judge*, AND SENTELLE, HENDERSON,* RANDOLPH, ROGERS,** TATEL,** GARLAND,* BROWN, AND GRIFFITH,** *Circuit Judges*.

ORDER

The petition of petitioners Commonwealth of Massachusetts, States of Maine, Oregon, Rhode Island, and Washington, and the District of Columbia for rehearing en banc and the opposition thereto were circulated to the full court, and a vote was requested. Thereafter a majority of the judges eligible to participate did not vote in favor of the petition. Upon consideration of the foregoing, it is

ORDERED that the petition be denied.

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

BY:
Michael C. McGrail
Deputy Clerk

* Circuit Judges Henderson and Garland did not participate in this matter.

** Circuit Judges Rogers, Tatel, and Griffith would grant the petition for rehearing en banc.

** A separate statement by Circuit Judge Tatel, in which Circuit Judge Rogers joins, dissenting from the denial of rehearing en banc, is attached.

TATEL, *Circuit Judge*, with whom ROGERS, *Circuit Judge*, joins, dissenting from the denial of rehearing en banc:

In this case, several states and environmental groups petitioned for review of EPA's refusal to regulate greenhouse gases. The case presents two questions: 1) whether EPA has authority under the Clean Air Act (CAA) to regulate greenhouse gas emissions, and 2) whether, if it has such authority, its refusal to regulate greenhouse gases was arbitrary and capricious. Although the panel's decision denying the petitions has no precedential effect—the panel never considered the first question and Judge Randolph's views on the second are his alone—the case involves the threat of global warming and its attendant consequences for human health and the environment, and therefore presents an issue of "exceptional importance." Fed. R. App. P. 35; *see also* Douglas H. Ginsburg & Donald Falk, *The Court En Banc: 1981-1990*, 59 Geo. Wash. L. Rev. 1008, 1025 (1991) ("A case may be of exceptional importance to the public if it concerns . . . a unique issue of great moment to the community . . . ."). Indeed, if global warming is not a matter of exceptional importance, then those words have no meaning.

Contrary to *Ethyl Corp. v. EPA*, 541 F.2d 1 (D.C. Cir. 1976) (en banc), moreover, the panel's judgment permitted EPA to consider policy matters unconnected to the standard set by CAA section 202(a)(1). *See Ethyl*, 541 F.2d at 29 ("All of this is not to say that Congress left the Administrator free to set policy on his own terms. To the contrary, the policy guidelines are largely set, both in the statutory term 'will endanger' and in the relationship of that term to other sections of the Clean Air Act. These prescriptions direct the Administrator's actions."); *Mass. v. EPA*, 415 F.3d 50, 74-82 (Tatel, J., dissenting). Specifically, EPA offered several policy justifications to avoid making an endangerment finding for greenhouse gases, none of which has any bearing on the only question legitimately before it under CAA section 202(a)(1): whether greenhouse gases emitted from new cars "in [the Administrator's] judgment cause, or contribute

to, air pollution which may reasonably be anticipated to endanger public health or welfare." CAA § 202(a)(1), 42 U.S.C. § 7521(a)(1); *see also Mass. v. EPA*, 415 F.3d at 74-81 (Tatel, J., dissenting). As to that question, EPA acknowledges not only that automobile emissions produce greenhouse gases, *see* Control of Emissions from New Highway Vehicles and Engines, 68 Fed. Reg. 52,922, 52,931 (Sept. 8, 2003) ("[t]he U.S. motor vehicle fleet is one of many sources of [greenhouse gas] emissions both here and abroad"), but also that greenhouse gases in turn contribute to climate change, *see id.* (noting the President intends to "begin now to address the factors that contribute to climate change" in part through "voluntary reductions in [greenhouse gas] intensity"); *see also Mass. v. EPA*, 415 F.3d at 77-78 (Tatel, J., dissenting) (noting both that EPA never suggested that uncertainties surrounding the nature of global warming prevent an endangerment finding and that evidence before the Agency would not support that position). In short, EPA all but concedes that automobile greenhouse gas emissions "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." Although *Ethyl* recognizes EPA's discretion to interpret data from health risk assessments, nothing in *Ethyl* authorizes the Agency to do what it did here, i.e., to ignore record evidence of impending public harm and to refuse altogether to assess related risks.

For these reasons, I respectfully dissent from the denial of rehearing en banc.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 03-1361 **September Term, 2005**

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Petitioners
v.
ENVIRONMENTAL PROTECTION AGENCY,
Respondent

UNITED STATES COURT OF APPEALS
FOR DISTRICT OF COLUMBIA CIRCUIT
FILED DEC 2 2005

ALLIANCE OF AUTOMOBILE MANUFACTURERS, ET AL.,
Intervenors

Consolidated with 03-1362, 03-1363, 03-1364, 03-1365, 03-1366, 03-1367, 03-1368,

BEFORE: Sentelle, Randolph and Tatel,* Circuit Judges

ORDER

Upon consideration of the petition of petitioners Commonwealth of Massachusetts, States of Maine, Oregon, Rhode Island, and Washington, and the District of Columbia for rehearing filed August 29, 2005, and the response thereto, it is **ORDERED** that the petition be denied.

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

BY: /s
Michael C. McGrail
Deputy Clerk

*Circuit Judge Tatel would grant the petition for rehearing.

UNITED STATES COURT OF APPEALS
FOR THE DISTRICT OF COLUMBIA CIRCUIT

No. 03-1361 **September Term, 2004**

COMMONWEALTH OF MASSACHUSETTS, ET AL.,
Petitioners
ENVIRONMENTAL PROTECTION AGENCY,
Respondent

UNITED STATES COURT OF APPEALS
FOR DISTRICT OF COLUMBIA CIRCUIT

FILED AUG 15 2005

ALLIANCE OF AUTOMOBILE MANUFACTURERS, ET AL.,
Intervenors

Consolidated with 03-1362, 03-1363, 03-1364, 03-1365, 03-1366, 03-1367, 03-1368,

---

On Petitions for Review of an Order of the
Environmental Protection Agency

Before: Sentelle, Randolph and Tatel, *Circuit Judges*

JUDGMENT

These causes came on to be heard on the petitions for review of an order of the Environmental Protection Agency and were argued by counsel. On consideration thereof, it is

ORDERED and ADJUDGED that the petitions for review in No. 03-1361, 03-1362, 03-1363, and 03-1364 are hereby denied and the petitions for review in No. 03-1365, 03-1366, 03-1367, and 03-1368 are hereby dismissed, in accordance with the opinion of the court filed herein this date.

MANDATE

Pursuant to the provisions of Fed.R.App.Pro.41(a)

ISSUED: 12, 23, 05

BY: /s_____, Deputy Clerk

ATTACHED: __ Amending Order

__ Opinion

__ Order on Costs

Per Curiam

FOR THE COURT:
Mark J. Langer, Clerk

BY: /s
Michael C. McGrail
Deputy Clerk

Date: August 15, 2005

Opinion for the court filed by Circuit Judge Randolph.

Opinion dissenting in part and concurring in the judgment filed by Circuit Judge Sentelle.

Dissenting opinion filed by Circuit Judge Tatel.

STATUTES INVOLVED

CLEAN AIR ACT: Sections 202(a)(1), -(a)(2)

42 U.S.C. §7521. Emission standards for new motor vehicles or new motor vehicle engines

(a) Authority of Administrator to prescribe by regulation

Except as otherwise provided in subsection (b) of this section -

(1) The Administrator shall by regulation prescribe (and from time to time revise) in accordance with the provisions of this section, standards applicable to the emission of any air pollutant from any class or classes of new motor vehicles or new motor vehicle engines, which in his judgment cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare. Such standards shall be applicable to such vehicles and engines for their useful life (as determined under subsection (d) of this section, relating to useful life of vehicles for purposes of certification), whether such vehicles and engines are designed as complete systems or incorporate devices to prevent or control such pollution.

(2) Any regulation prescribed under paragraph (1) of this subsection (and any revision thereof) shall take effect after such period as the Administrator finds necessary to permit the development and application of

therequisitetechnology,givingappropriateconsideration to the cost of compliance within such period.

CLEAN AIR ACT: Sections 302(g) and (h)

42 U.S.C. § 7602. Definitions

When used in this chapter -

(g) The term "air pollutant" means any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material, and by product material) substance or matter which is emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term "air pollutant" is used.

(h) All language referring to effects on welfare includes, but is not limited to, effects on soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate, damage to and deterioration of property, and hazards to transportation, as well as effects on economic values and on personal comfort and well-being, whether caused by transformation, conversion, or combination with other air pollutants.